Exhibit 78

Interim Report Examining Potential Race-Neutral Strategies in Undergraduate Admissions at University of North Carolina at Chapel Hill

May 2018

Prepared by the Race-Neutral Strategies Committee of the Advisory Committee on Undergraduate Admissions.

THIS REPORT CONTAINS CONFIDENTIAL INFORMATION SUBJECT TO THE PROTECTIONS OF THE ATTORNEY-CLIENT PRIVILEGE

Interim Report

Examining Potential Race-Neutral Strategies in Undergraduate Admissions at University of North Carolina at Chapel Hill¹

Spring 2018

In Spring 2016 a committee of faculty, professional staff, and administrators was convened and charged by Provost James Dean to examine workable race-neutral strategies and practices in undergraduate admissions at the University of North Carolina at Chapel Hill ("The Committee on Race-Neutral Strategies"). This Committee, a Subcommittee of the standing faculty governance Advisory Committee on Undergraduate Admissions (*Faculty Code of University Government*, Article § 4-24), was charged to:

- 1. Consider whether there are workable race-neutral strategies and practices that the Office of Undergraduate Admissions could employ in evaluating applications for undergraduate admission;
- 2. Advise the Office of Undergraduate Admissions about these strategies and practices; and
- 3. Report to the Advisory Committee on the Committee's consideration of specific raceneutral strategies approximately every two years. In addition, the Committee will, as appropriate, provide information regarding its assessments and recommendations to the Dean of the College of Arts and Sciences, the Executive Vice Chancellor and Provost, the Chancellor, and the Board of Trustees.

The full Committee charge is given in Appendix A. The Committee membership, including a short description of member areas of expertise, are given in Appendix B. The Committee was asked to evaluate what race-neutral alternatives, if any, would allow the University to achieve its joint objective and mission to achieve diversity in the incoming undergraduate student body while at the same time not sacrificing academic quality and/or requiring an untenable administrative expense. The work of this committee included considering the University's existing diversity interests and objectives, whether existing admissions practices are needed to help the University meet those interests and objectives, and what, if any, adjustments to the current practices are warranted. The Committee approached the charge and the tasks before them

¹ Some portions of this report have been redacted before distributing or publishing.

² Faculty Code of University Government, § 4-24, pp.18-19: Advisory Committee on Undergraduate Admissions. (a) The Advisory Committee on Undergraduate Admissions consists of the dean of the College of Arts and Sciences or the dean's designee as chair; the associate dean for academic advising in the College of Arts and Sciences, two other academic deans from outside the College of Arts and Sciences, and seven faculty members engaged in undergraduate instruction, all appointed by the chancellor. At least five of these faculty members hold primary appointments in the College of Arts and Sciences. The university registrar, the director of undergraduate admissions, and the vice chancellor for student affairs are ex officio, non-voting members of the committee. (b) The committee serves in an advisory capacity to the director of undergraduate admissions. In particular, it addresses the design and application of admissions policy, recommends guidelines for special talent and exceptional admissions, and monitors and responds to the national college admissions environment. (c) The committee meets at least once each semester or more on call of the chair. The chair calls a meeting whenever requested by the director of undergraduate admissions.

in a scholarly way, with good faith, with an open mind, and without preconceived notions about what the Committee might discover.

General Summary of Committee Activities

The Committee met regularly beginning in Spring 2016 with a total of 15 meetings as of April 9, 2018. Meeting dates and minutes are presented in Appendix C. Key meeting activities and discussions included several topics as outlined below.

University's Diversity Initiatives and Objectives. The Committee evaluated whether there are race-neutral alternatives that would allow the University to achieve these objectives without sacrificing the academic quality of the entering class or imposing intolerable administrative expense. Without clear operational definitions for potential intolerable cost, the Committee sought to understand and determine what intolerable administrative cost might be in the local context of the University. The Committee consideration included information gleaned from University leaders, faculty members, and students; whether existing admissions practices are necessary to help the University meet its diversity interests and objectives; and what, if any, adjustments to those practices are warranted.

Legal Standards and Guidance for Undergraduate Admissions. To assure that the Committee's evaluation was informed by existing legal standards and guidance, as well as the practices of the University's peer institutions, the Committee discussed legal developments as undergraduate admissions at comparable, highly selective institutions. The Committee received legal input and framing from University Counsel, as well as Professor Lau, at multiple points during its work. Examples of examined materials include reading documents from the Office of Admissions, briefs on admissions practices by the College Board, journal articles, and items from the media about undergraduate admissions practices around the country

The University's Mission and Diversity Goals. The Committee engaged in a robust discussion of the University's mission and diversity goals, including the educational benefits of diversity, and the importance of a diverse student body to achieving those goals. The Committee invited Executive Vice Chancellor and Provost James Dean to lead a discussion about the important role of student body diversity specifically, and diversity in work settings. Many of the ideas that Provost Dean expressed during this meeting appeared in his May 2017 report (Appendix D), *The Educational Benefits of Diversity and Inclusion for Undergraduate Students at the University of North Carolina at Chapel Hill*, which the Committee also read and reviewed.

Current Undergraduate Admissions Policies and Practices. The Committee learned about the University's admissions policies and practices through a presentation and question-and-answer session from staff members of the Office of Undergraduate Admissions, review and discussion of the University's admissions Reading Document, and a mock evaluation of sample applications for admission. Additionally, because members of the Committee are also members of the professional staff for the Office of Undergraduate Admissions (e.g., Stephen Farmer, Barbara Polk, Jennifer Kretchmar), questions about admissions policies and practices that arose during Committee discussions and deliberations were addressed directly.

Development and Initial Activities of Working Subcommittees. The Committee reviewed an earlier report, *Exploring Race-Neutral Alternatives in Undergraduate Admissions* (Appendix E) prepared by the Working Group on Race-Neutral Alternatives. To understand that report's findings and conclusions, the Race-Neutral Strategies Committee met with members of the Working Group and then as a group, identified specific ways to extend and build upon the prior work. The Committee considered the prior work carefully yet felt free to explore new directions and were not bound by specific methodologies or approaches used previously. As a result, the Committee organized into three working Subcommittees.

Regular Reporting of Subcommittee Activities and Research Priorities. The Committee's structure allowed for different important directions to be examined concurrently, with regular sharing of progress from each Subcommittee. Subcommittee members discussed progress with the larger group and worked with the larger group to determine next steps for analyses. This iterative approach allowed for the members from different Subcommittees to benefit from each other's work and be responsive to analytic decisions and questions as new research, analyses, and discussion came to the forefront.

Three Working Subcommittees: Charges

The charge for each Subcommittee is given in Appendix F.

- 1. The Literature Review Subcommittee, chaired by Professor Holning Lau (School of Law), was charged to review the current social science and legal literature on race-neutral alternative admission practices and identify relevant practices of peer institutions. Professor Lau was assisted by two research assistants and law students (Kerry Dutra, Zachary Layne, Hillary Li).
- 2. The Data Analytics Subcommittee, co-chaired by Professor Patrick Curran (Department of Psychology and Neuroscience) and Professor Michael Kosorok (Department of Biostatistics; Department of Statistics and Operations Research), was charged to analyze whether race-neutral alternatives identified by the Literature Review Subcommittee are workable for the University. The leaders of this Subcommittee were assisted by a doctoral student and research assistant in biostatistics (Arkopal Choudhury). The Subcommittee identified data sources and analytical approaches to examine these race-neutral approaches and their ability to achieve the desired institutional outcomes for the incoming first-year class without sacrificing academic quality. The Subcommittee received regular input about data cleaning, variables, analyses, and next steps from the larger Committee.
- 3. The Impact of Diversity on Student Experience Subcommittee, chaired by Associate Vice Chancellor of Student Affairs Bettina Shuford, was charged with using existing survey findings from University assessments on student perspectives regarding the impact of diversity, inclusion, and campus climate on students' educational experiences at the University. Additionally, the Subcommittee on the Impact of Diversity on the Student Experience was tasked with conducting a review of the social science literature on the impact of diversity on the student experience. Dr. Shuford worked with a team from the Division of

Student Affairs to assess existing survey sources and with Professor Curran and Dr. Belinda Locke (Coordinator for Assessment and Strategic Planning, Student Affairs) to examine a specific survey instrument.

General Findings and Ongoing Work from the Subcommittees

Reports for each of the Subcommittees (Literature Review Report, Data Analytics Report, Impact of Diversity on Student Experience) are provided in Appendix G and have been reviewed by the larger Race-Neutral Strategies Committee.

1. The Literature Review Subcommittee. This Subcommittee updated the literature review completed by the Working Group on Race-Neutral Alternatives. This updated literature review identified five major categories of race-neutral strategies discussed in the academic literature and explored the race-neutral practices at other institutions: Existing percent plans, plans based on socioeconomic status, eliminating legacy/development preferences and early admissions programs, race-neutral holistic reviews, and increased outreach for top performing students from underrepresented groups.

The Subcommittee reviewed literature about three race-neutral admission strategies: (1) percent plans; (2) socioeconomic affirmative action programs; and (3) race-neutral diversity essays. These strategies can be "race-conscious," meaning that schools can adopt these strategies with the aim of securing a racially diverse student body. These strategies are, however, "race-neutral" in that they do not overtly differentiate applicants by race. The Subcommittee focused its literature review on publications that were not captured in the previous literature review that the Committee on Race-Neutral Strategies performed for its 2016 report. In addition, the literature review suggested that these three strategies were the most promising for potential empirical study and implementation.

Research generally suggests that percent plans are unlikely to be effective and efficient substitutes for admission strategies that overtly consider race. For example, research on the University of Texas at Austin's percent plan is, at best, inconclusive regarding the program's effectiveness. While Black and Latinx representation among admitted students increased after UT Austin adopted its percent plan, that increase may be attributable to demographic changes in Texas as opposed to the percent plan. Moreover, even if a percent plan produces a racially diverse class, it does so inefficiently: by admitting students based on class rank alone, universities must ignore other aspects of student quality that it might consider important (e.g., standardized test scores, extracurricular activities, leadership skills, resilience, etc.). Similarly, research generally suggests that socioeconomic affirmative action programs—which grant preferential treatment to applicants from disadvantaged socioeconomic backgrounds—are also unlikely to produce effectively desired levels of racial diversity. Meanwhile, the Subcommittee found that there is a dearth of literature on the effects of race-neutral diversity essays.

This literature review has cast doubt on the utility of race-neutral strategies as complete substitutes for overt considerations of race. Still, the literature suggests that the outcomes of race-neutral admission strategies vary depending on the circumstances surrounding the

particular universities at issue. Accordingly, the Committee on Race-Neutral Strategies should examine these strategies' appropriateness specifically for UNC-Chapel Hill. For its 2016 report, the Committee conducted simulation-based evaluations of implementing various percent plans at UNC-Chapel Hill. Those simulations can be updated and expanded. The Committee should also run simulations of socioeconomic affirmative action programs, perhaps drawing inspiration from the "Disadvantage Index" used by the University of Colorado at Boulder's admissions office. This examination of a version of the index is feasible because UNC-Chapel Hill can identify matches or close proxies for most variables comprising the Colorado index and can potentially supplement that index with additional variables. Finally, the Committee should consider having further discussions about the advantages and disadvantages of race-neutral diversity essays, but there is very little existing empirical research to inform such discussions.

Future Directions. The Subcommittee will continue to work with the broader Committee to determine which of the race-neutral alternatives it has identified warrant further consideration and empirical analysis. As necessary, this Subcommittee will continue to identify new research and potentially promising specific race-neutral alternatives to account for any new practices or reported outcomes from peer institutions.

2. The Data Analytics Subcommittee. This Subcommittee conducted an analysis designed to empirically examine the role of various undergraduate applicant factors (including race/ethnicity) that were considered as a part of the holistic admissions process during the 2016-2017 application cycle and presented its findings to the larger Committee. The Subcommittee also developed infrastructure for statistical and data analyses that ultimately can be used to evaluate potential race-neutral alternative strategies. After completing analyses, the Subcommittee examined its findings across five application cycles: the current year as well as the four prior years (2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017).

To model the University's current admissions process, a series of logistic regression models of varying complexity were estimated in which the full set of measured variables described in Appendix F (e.g., certain applicant factors captured in the admissions data) were used to predict admission status. Variables entered the model both linearly and nonlinearly with the inclusion of extensive interactions and polynomial terms. These models were then extended to use the model-building process of random forests. Numerical results were extensive. Key findings reflect that there are a large number of unique applicant variables that predict admissions status, including underrepresented minority status. Importantly, however, when the model was evaluated without information about applicants' racial/ethnic status, the model's accuracy in terms of the prediction of the applicants' admissions outcome was virtually unchanged. This finding reflects that underrepresented minority status does not meaningfully drive the prediction accuracy of the final multivariate model. Put differently, applicants' racial/ethnic status does not dominate the outcome decision within the current admissions process.

The Data Analytics Subcommittee also contributed to modeling efforts for the Student Experience Subcommittee. These efforts are briefly described in the next section.

Future Directions. There are four primary directions to which we next turn. First, these initial models were only fitted to available 2016 data; the models will be expanded to a simultaneous analysis of all five years of data to formally examine stability and change in trends over time. Second, efforts will be made to link the existing admissions data to extant family-level data to provide more comprehensive information about constructs such as socioeconomic status (SES); the currently available data only provide information about first generation status and fee waiver requests. Much more comprehensive information about family income, parent education, and parent occupation are needed to more fully assess SES. These data allow us to have a fuller understanding of a student's full record, continue to identify relevant and available indicators about family background and SES from the literature, and discuss how educational benefits flow from a diverse student body during college. Third, more advanced machine learning methods will be used to build optimal prediction models based on all available information within and across time. These models will provide an estimate of differential weights that can be applied to each variable domain in the prediction equation; once available, weights can then be fixed and adjusted to determine the subsequent impact on incoming class characteristics as a function of competing alternative selection weighting processes. Finally, the data analytic committee will carefully review expert reports prepared in the University's lawsuit to ensure that future analyses consider promising directions and approaches. Taken together, these results will provide a stronger understanding of the current applicant review and the admissions process.

3. The Student Experience Subcommittee. This Subcommittee analyzed existing university survey instruments that are regularly administered to undergraduate students at UNC-Chapel Hill and looked at evidence regarding campus climate, psychosocial development, student engagement, and learning outcomes. It also conducted a review of the higher education and social sciences literature on student engagement, perceptions of campus climate, sense of belonging, psychosocial development and learning outcomes.

Using student responses from the <u>Multi-Institutional Study of Leadership</u> (MSL), the Subcommittee collaborated with the Data Analytics Subcommittee to model educational outcomes with the 2015 UNC-Chapel Hill data set. The MSL data modeling included markers related to campus climate (sense of belonging and perceptions of discrimination) with student engagement (interaction with individuals who are culturally different and participation in co-curricular activities) on educational outcomes related resiliency. The Subcommittee also examined theory and research on these constructs in the literature.

One of the most promising avenues to emerge in the work to date has been the development, testing and refinement of a model identifying a set of pathways and mechanisms through which campus climate contributes to educational outcomes through the mediating influences of student engagement. The model was developed and tested using an institutional data set based on responses of a random sample of undergraduate students who participated in the 2015 Multi-Institutional Study of Leadership.

A series of competing models were fit to the sample data to examine potential relations among student characteristics, sense of belongingness, diverse interactions, and school

success. A diagram of one competing model (given in Appendix G) indicated that students who self-identify as URM have lower perceptions of sense of belongingness on campus and are less likely to endorse the perceptions that the campus climate is inclusive. Higher levels of belongingness and participation in activities are associated with greater diverse interactions on campus, and this in turn is related to higher levels of academic resiliency. Interestingly, URMs report higher levels of resiliency compared to non-URMs after controlling for all other influences in the model. These preliminary results indicate that higher numbers of diverse interactions are associated with higher levels of academic resiliency, but that URMs report feeling less belonging to the campus community and are less likely to view the community as inclusive. This is only one example of a number of competing models examining these complex multivariate relations.

The Subcommittee identified other institutional and national benchmarking surveys that included variables in the framework including the Educational Benchmarking Study/Skyfactor Benchwork Assessments for Carolina Housing, <u>Student Experience in the Research University</u> (SERU), the <u>Sophomore Survey</u>, and the <u>Senior Survey</u>. Key questions from each instrument were identified for future analysis. Unlike the MSL data set where the focus is on student leadership engagement, SERU includes a module on the academic experience that provides a broader array of outcomes and is particularly appropriate because it was designed for research universities.

Future Directions. The Subcommittee is pursuing multiple future directions in this work in collaboration with the Data Analytics Subcommittee. These directions will help provide more nuance to our existing findings related to perception of campus climate, sense of belonging, engagement in co-curricular and academic engagement, psychosocial development and resiliency by race.

First, members of the Subcommittee will seek to link the MSL data to the existing undergraduate admissions data so that the extensive information provided by the student when applying for admissions can be incorporated into the student experiences once on campus.

Second, Subcommittee members will extend these analyses to include prior panels of data (dating back to 2012) to examine stability and trends in these relations over time.

Third, Subcommittee members will expand the models to include data from other sister institutions, so we may compare and contrast the Carolina experience with that reported by other comparison universities. Specifically, the Subcommittee plans to work with organizations that administer national benchmarking surveys to explore the possibility of adding additional diversity-related survey items to these benchmarking surveys. If granted permission by the national study administrators for MSL and SERU, the benchmarking analysis will involve creating a diversity index measure to compare outcomes based on low, medium and high levels of diversity within- and across-campuses participating in the national data collection. A diversity index, used in several research studies, represents the probability that any two people from a random sample will differ on the basis of race and ethnicity.

Interactional diversity is likely to increase as the structural diversity on campus increases (Chang, 1999).

Fourth, the Subcommittee members will conduct modeling using other national data sets, such as the Student Experience in the Research University (SERU) and the Skyfactor Benchwork survey for residential living.

Fifth, the Committee chair, along with colleagues with expertise in measurement and item response modeling, will examine the psychometric properties of student ratings of education benefits of diversity across multiple academic courses. Student characteristics (e.g., gender, need, first generation status, underrepresented status), faculty characteristics (e.g., gender, underrepresented status, rank), and course characteristics (e.g., size, gateway, division) will be assessed for differential item functioning and the multilevel nature of the ratings will be examined if possible.

Finally, the Subcommittee members will continue to be informed by the review of the academic literature on the theoretical models and research related to these concepts.

Conclusion

The work of the Committee is ongoing, and the Committee will continue to use multiple pathways of analyses to identify potential race-neutral alternatives for undergraduate admissions at UNC-Chapel Hill. The potential alternatives are examined while considering in light of the University's mission, current campus climate, and the academic needs of its student body. Key directions include: (a) ensuring that emergent potential options from national peers or demonstration projects are evaluated; (b) empirically assessing the relative weight of race/ethnicity as compared to other competing factors, particularly socioeconomic indicators, as alternatives when modeling admissions data over time using all potential variables that could be available during holistic review; (c) using the strength of student and academic data from existing undergraduate survey administrations – locally at UNC-Chapel Hill and nationally across institutions that vary on multiple dimensions — to understand campus climate as a function of race/ethnicity; and (d) enhancing national data collection efforts, where possible, with supplemental relevant survey items, thereby contributing to the national dialogue about the role of race/ethnicity in the campus climate.

The Committee will document and present its ongoing efforts, findings, and conclusions. Consistent with the dissemination of the current report, subsequent reports about this Committee's work will be distributed to the Committee, the Admissions Advisory Committee, University leadership, as well as to the Chancellor, and the Provost. The report will also be disseminated to all faculty as part of the Admissions Advisory Committee annual report to Faculty Council. The Committee will also update the Advisory Committee on Undergraduate Admissions, University leadership, and the Office of Undergraduate Admissions regarding its ongoing work as appropriate. This report will be presented to the first Undergraduate Admissions Advisory Committee meeting of the fall semester (September 2018).

Appendix A Charge for the Committee on Race-Neutral Strategies

ADVISORY COMMITTEE ON UNDERGRADUATE ADMISSIONS COMMITTEE ON RACE-NEUTRAL STRATEGIES CHARGE

The Advisory Committee on Undergraduate Admissions ("Advisory Committee"), a standing committee of the faculty chartered under the *Faculty Code of University Government*, hereby establishes the Committee on Race-Neutral Strategies ("Committee"). The Committee is charged to:

- Consider whether there are workable race-neutral strategies and practices that the Office of Undergraduate Admissions could employ in evaluating applications for undergraduate admission;
- Advise the Office of Undergraduate Admissions about these strategies and practices; and
- Report to the Advisory Committee on the Committee's consideration of specific race- neutral strategies approximately every two years. In addition, the Committee will, as appropriate, provide information regarding its assessments and recommendations to the Dean of the College of Arts and Sciences, the Executive Vice Chancellor and Provost, the Chancellor, and the Board of Trustees

The Committee's work is essential given the guidance the Supreme Court has offered regarding the consideration of race in admissions assessments. The adoption of race-conscious admissions practices requires adherence to standards of strict scrutiny and narrow tailoring. In its decision in *Grutter v. Bollinger*, the Supreme Court explained that those standards, among other things, require institutions to give "serious, good faith consideration [to] workable race-neutral alternatives that will achieve the diversity" sought by the University. The Court also made clear that universities are not required to adopt any alternative that "would require a dramatic sacrifice of diversity, the academic quality of all admitted students, or both." In its decision in *Fisher v. University of Texas*, the Supreme Court reiterated that the University's serious, good faith consideration of race-neutral alternatives is "necessary" and explained that "The reviewing court must ultimately be satisfied that no workable race-neutral alternatives would produce the educational benefits of diversity. If a nonracial approach . . . could promote the substantial interest about as well and at tolerable administrative expense, then the university may not consider race."

The Committee will be briefed about the University's diversity initiatives and objectives. With that context, the Committee will evaluate whether there are race-neutral alternatives that would allow the University to achieve these objectives without sacrificing the academic quality of the entering class or imposing intolerable administrative expense. This evaluation will include consideration of information gleaned from University leaders, faculty members, and students; whether existing admissions practices are necessary to help the University meet its diversity interests and objectives; and what, if any, adjustments to those practices are warranted.

In order to assure that the Committee's evaluation is informed by existing legal standards and guidance and the practices of the University's peer institutions, the Committee will stay abreast of legal developments as well as best practices in undergraduate admissions at comparable highly selective institutions.

Appendix B Membership for the Committee on Race-Neutral Strategies

MEMBERSHIP FOR THE COMMITTEE ON RACE-NEUTRAL STRATEGIES

Rumay Alexander Office of Diversity and Inclusion

Patrick Curran Department of Psychology and Neuroscience

Jonathan Engel Department of Physics and Astronomy
Stephen Farmer Office of Undergraduate Admissions
Michael Kosorok Gillings School of Global Public Health
Jen Kretchmar Office of Undergraduate Admissions

Holning Lau School of Law

Ming Lin Computer Science; now at University of Maryland Abigail Panter College of Arts and Sciences, Committee Chair

Barbara Polk Office of Undergraduate Admissions

Douglas Shackelford School of Business

Bettina Shuford Division of Student Affairs

Short Biographies of Committee Members

G. Rumay Alexander is Chief Diversity Officer and Associate Vice Chancellor of the University of North Carolina at Chapel Hill and Professor at the University's School of Nursing. Dr. Alexander holds a baccalaureate degree in nursing from the University of Tennessee Knoxville, a master's degree in nursing from Vanderbilt University, and a Doctor of Education degree from Tennessee State University. She has a compelling record of leadership and advocacy for diversity and inclusive excellence in academia, the workplace, in national nursing professional organizations and in her consultant activities. She provides leadership for not only the school of the nursing but the Gilling's School of Public Health, the UNC School of Dentistry and UNC's Faculty Governance's Community and Diversity Committee. Her passion centers on intentional efforts to resource the proper understanding and judicious application of equity and multicultural concepts for its students, faculty, personnel and the patients served by their graduates. This includes the facilitation of system-wide efforts for giving respect to the many dimensions of human difference as well as the lived experience of difference. Dr. Alexander is the President of the National League of Nursing. She is also a two-term member on the Board of Governors of the National League for Nursing and the American Organization of Nurse Executives. In 2010, she was the American Organization of Nurse Executive's Prism Award recipient for workforce diversity leadership and in 2013, the National Student Nurses' Association bestowed her with their most prestigious award of Honorary Membership. She received the Southern Regional Education Board's M. Elizabeth Carnegie Award in 2013.

Patrick Curran is a Professor in the Department of Psychology and Neuroscience at the University of North Carolina at Chapel Hill and is an adjunct faculty member in the Center for Developmental Science. He also serves as Director of the L. L. Thurstone Psychometric Laboratory at the University of North Carolina that houses the doctoral program in Quantitative Psychology. Dr. Curran's quantitative program of research is primarily focused on the development, evaluation, and application of advanced statistical methods designed to evaluate individual stability and change over time. His substantive program of research is focused on risk

and protective factors in developmental trajectories of drug and alcohol use and abuse in children and adolescents. Dr. Curran has published over 100 peer reviewed manuscripts and book chapters and has co-authored a text book on statistical modeling of longitudinal data; his published work has jointly garnered more than 25,000 citations. His program of research has been continuously funded by the National Institutes of Health since 1999 and he has received both University and National awards in recognition of his research and teaching.

Jonathan Engel is a professor and associate chair of physics and astronomy at UNC-Chapel Hill. He earned his Bachelor of Science degree from Massachusetts Institute of Technology in 1981, his doctorate from Yale University in 1986, and, had postdoctoral fellow positions at Cal Tech (1986-1989) and the Bartol Research Institute from 1989-1993. His research areas include nuclear theory and its application to problems of fundamental importance in particle physics and astrophysics. Topics in this interdisciplinary line of research include double beta decay (and the mass of the neutrino), CP violation in nuclei, nucleosynthesis in stars and supernovae, and neutrino scattering and the weak interaction in nuclei. He is interested in the foundations of nuclear structure, particularly density-functional theory in heavy nuclei. He teaches an interdisciplinary course (Physics and Philosophy), Quantum Mechanics, Weirdness, and Reality.

Stephen Farmer is Vice Provost for Enrollment and Undergraduate Admissions at the University of North Carolina at Chapel Hill and leads the selection and recruitment of the undergraduate student body. Born and raised in rural Virginia, Farmer holds a master's degree in English from the University of Virginia and a bachelor's degree in English as an A. B. Duke Scholar from Duke University. With other leaders and staff members in admissions and enrollment, he is responsible for undergraduate admissions, scholarships and student aid, and student records. Farmer shares leadership of the Thrive@Carolina, a movement to strengthen success for all students at Carolina. He also founded the Carolina College Advising Corps, which places 60 recent UNC-Chapel Hill graduates as full-time college advisers in high schools statewide, with the aim of encouraging low-income students to enroll in colleges that will serve them well. In 2010, Steve received the C. Knox Massey Distinguished Service Award and the 2017 General Alumni Association Distinguished Service Medal.

Michael Kosorok is W. R. Kenan, Jr. Distinguished Professor of Biostatistics and Professor of Statistics and Operations Research at UNC-Chapel Hill. He is the chair of biostatistics. Dr. Kosorok research expertise is in biostatistics, data science, machine learning and precision medicine, and he has written a major text on the theoretical foundations of these and related areas in biostatistics (Kosorok, 2008, Springer), as well as co-edited (with Erica E. M. Moodie, 2016, ASA-SIAM) a research monograph on dynamic treatment regimes and precision medicine. He also has expertise in the application of biostatistics and data science to human health research, including cancer and cystic fibrosis. He is the contact principal investigator on a National Cancer Institute program project grant (P01 CA142538), which focuses on statistical methods for novel cancer clinical trials in precision medicine, including biomarker discovery and dynamic treatment regimes. He has pioneered machine learning and data mining tools for these and related areas.

Jen Kretchmar (B.A., Penn State, 1993; Ph.D., UNC-Chapel Hill, 2001) is the Associate Director for Research and Reporting in the Office of Undergraduate Admissions. Dr. Kretchmar builds yearly projection models to predict yield, evaluates the effectiveness of recruitment activities, conducts focus groups with current and prospective students, administers online surveys, assesses the predictive validity of standardized exams and other academic indicators, and responds to internal and external data requests. Dr. Kretchmar also evaluates applicants and participates in recruitment activities. Prior to coming to UNC in 2001, Dr. Kretchmar served as a research analyst with Westat.

Holning Lau teaches International Law of Human Rights, Comparative Constitutional Law, and Family Law. Professor Lau also serves as Associate Dean for Faculty Development and as Faculty Director of the law school's LL.M. program. Professor Lau's current research examines international and comparative approaches to equality rights. He is also co-editing the forthcoming Oxford Handbook of Constitutional Law in Asia. Professor Lau joined the UNC faculty in 2009, after spending two years as an Associate Professor of Law at Hofstra Law School, where he also co-directed Hofstra's LGBT Rights Fellowship Program. Prior to joining the Hofstra faculty, Professor Lau worked at UCLA School of Law's Williams Institute on Sexual Orientation and Gender Identity Law and Public Policy. He has served twice as a visiting fellow at the University of Hong Kong's Centre for Comparative and Public Law. In addition, Professor Lau has worked for the Hong Kong Human Rights Monitor, Children Rights, and the law firm of Debevoise & Plimpton in New York. He is also a past president of the ACLU of North Carolina. Professor Lau received his J.D. from the University of Chicago, where he was the Executive Topics & Comments Editor of the University of Chicago Law Review and served on the staff of the Chicago Journal of International Law. At the University of Chicago, Professor Lau was named a Stonewall Scholar for excellence in his work related to sexual orientation rights and was awarded the Ignacio Martín-Baró Award for the best human rights paper by a professional or master's degree student. Professor Lau completed his B.A. at the University of Pennsylvania, where he graduated Phi Beta Kappa and magna cum laude.

Ming C. Lin is the Elizabeth Stevinson Iribe Chair of Computer Science with a joint appointment in the University of Maryland Institute for Advanced Computer Studies, effective January 1, 2018, after 20 years on the University of North Carolina faculty as the John R. and Louise S. Parker Distinguished Professor of Computer Science. Dr. Lin earned her B.S., M.S. and Ph.D. in electrical engineering and computer sciences from the University of California, Berkeley. Dr. Lin is a noted educator and expert in virtual reality, computer graphics and robotics that focuses on multimodal interaction, physically based animations and simulations, as well as algorithmic robotics and their use in physical and virtual environments. Her research has extensive applications in medical simulations, cancer screening, urban computing, as well as supporting city-scale planning, human-centric computing, intelligent transportation and traffic management. She received a National Science Foundation Faculty Early Career Development Award in 1995, and she is a fellow of the Association for Computing Machinery, IEEE and the Eurographics Association. She serves on the board of directors of the Computing Research Association's Committee on the Status of Women in Computing Research. She has authored or co-authored more than 250 refereed publications and has authored or co-edited four books. She is a former editor-in-chief of IEEE Transactions on Visualization and Computer

Graphics (2011–2014) and served on numerous steering committees and advisory boards of international conferences, as well as government and industrial technical advisory committees. Lin co-founded the 3-D audio startup Impulsonic, which was recently acquired by Valve Software.

Abigail Panter (B.A., Wellesley College, 1985; Ph.D., New York University, 1989) is the Senior Associate Dean for Undergraduate Education and a professor of psychology in the L. L. Thurstone Psychometric Laboratory at UNC-Chapel Hill where she joined the faculty in 1989. She is past president of the American Psychological Association's Division on Quantitative and Qualitative Psychology. As a quantitative psychologist, she develops instruments, research designs and data-analytic strategies for applied research questions in higher education, personality and health. She is program evaluator for UNC's Chancellor's Science Scholars Program, a multisite adaptation of the successful Meyerhoff Program and principal investigator for The Finish Line Project, a \$3 million First in the World, U.S. Department of Education grant investigating supports and academic initiatives, especially for first-generation college students. Her books are on statistics, research methods in psychology, ethics in quantitative methodology, and program evaluation. Panter received numerous awards for her statistics teaching and mentoring, including the major awards at UNC-Chapel Hill and APA's Jacob Cohen Award for Distinguished Teaching and Mentoring. She is an APA fellow and has served on the Graduate Record Examination Advisory Board, a Social Security Administration advisory panel related to disability determination, and APA's Committee on Psychological Testing and Assessment. She regularly provides services for federal agencies, national advisory panels and editorial boards. As senior associate dean, she oversees the College of Arts and Sciences' programs in undergraduate education including curricula, student services, and honors. She works to develop the new general education curriculum, data driven approaches for undergraduate education, and programs to increase the high impact academic experiences for all undergraduate students.

Barbara Polk is currently serving as the Deputy Director of Undergraduate Admissions at the University of North Carolina at Chapel Hill. Ms. Polk graduated from the University of North Carolina at Chapel Hill in 1979 with a Bachelor of Science in the Administration of Criminal Justice and a Bachelor of Arts in Political Science. During her 30+ year tenure in that office, she has served as both Interim and Acting Director of Admissions and has had responsibility for almost every aspect of the admissions process. In addition to her work in Chapel Hill, she has served a three-year term as the North Carolina representative to the Southern Regional Council of the College Board, a six-year term on the North Carolina ACT Council, chaired the North Carolina Guidance Counselor Conferences and has served on local arrangements committees for AACRAO, SACRAO and CACRAO. In addition, she has served as a faculty mentor for the College Exploration Experience program, a summer program to assist rising high school seniors with the college selection process. She also served as a member of the selection committees for the Jack Kent Cooke College Scholarship Program and the Morehead-Cain Scholarship program.

Douglas Shackelford is the dean of UNC Kenan-Flagler. He is a seasoned academic leader, business education innovator and internationally recognized scholar. He received his PhD from the University of Michigan and his BS from UNC-Chapel Hill. An award-winning researcher and teacher, his work focuses on taxes and business strategy. His current areas of interest include

the effects of shareholder taxes on equity prices, taxation of multinationals and disclosure of corporate tax information. Dr. Shackelford served as the first associate dean of MBA@UNC, the innovative online MBA program, from 2010 until he became dean on Feb. 1, 2014. He served as senior associate dean for academic affairs from 2003-2007, and associate dean of the Master of Accounting Program from 1998-2002. He is the former director of the UNC Tax Center, which he founded in 2001. Dr. Shackelford is a research associate at the National Bureau of Economic Research (NBER) in Cambridge, MA. He has published widely in accounting, economics, finance and law journals. He has held visiting faculty positions at Stanford University, Universiteit Maastricht in the Netherlands and Oxford University. He was a senior tax consultant with Arthur Andersen in Boston and Greensboro from 1981-85.

Bettina Shuford serves as the Associate Vice Chancellor for Student Affairs. Dr. Shuford has significant experience with strategic planning, policy development, assessment, and diversity initiatives. She has been responsible for a wide range of student affairs functions, including campus health, student counseling, disability services, multicultural initiatives, career services, residence life and student retention. Prior to coming to UNC in 2011, Dr. Shuford served as the Assistant Vice President for Student Affairs at Bowling Green State University. Prior to coming to UNC in 2011, Dr. Shuford served as an Assistant Vice President for Student Affairs at Bowling Green State University and held positions in the Office of the Provost and the Center for Multicultural and Academic Initiatives on the same campus. Her research interests, publications, and presentations have focused on functions in multicultural affairs offices, assessment of multicultural affairs programs, minority student development, retention of students of color, affirmative action, and African American women in student affairs.

Appendix C Committee on Race-Neutral Alternatives Meeting Dates and Minutes

COMMITTEE ON RACE-NEUTRAL STRATEGIES MEETING DATES AND APPROVED MINUTES

MEETING DATES

2016

- 1. Tuesday, May 10, 2016
- 2. Wednesday, August 31, 2016
- 3. Friday, September 9, 2016
- 4. Friday, October 14, 2016
- 5. Wednesday, November 30, 2016
- 6. Friday, December 16, 2016

2017

- 1. Wednesday, February 8, 2017
- 2. Wednesday, March 1, 2017
- 3. Wednesday, April 5, 2017
- 4. Friday, May 12, 2017
- 5. Tuesday, September 12, 2017
- 6. September 26, 2017
- 7. November 27, 2017

2018

- 1. Wednesday, February 28, 2018
- 2. Monday, April 9, 2018

MEETING MINUTES

Committee on Race-Neutral Strategies Meeting of May 10, 2016 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10a. Dean Panter noted that the Committee on Race-Neutral Strategies (CRNS) was created to build upon the efforts of the Working Group on Race-Neutral Alternatives, which was convened in October 2013 and whose final report was received by the Advisory Committee on Undergraduate Admissions in February 2016.

After the committee members introduced themselves, Dean Panter explained that CRNS is charged with identifying possible race-neutral practices in admissions and assessing whether those practices would yield the undergraduate student body that the University requires in order to achieve its mission and provide the educational benefits of diversity. She noted that CRNS may wish to reexamine some or all of the strategies considered by the Working Group on Race-Neutral Alternatives but will also need to consider others. She also noted that each possible strategy will have its own costs and benefits and that CRNS will need to consider both carefully.

Professor Michael Kosorok asked about the current composition of the student body. Mr. Stephen Farmer responded that the Advisory Committee on Undergraduate Admissions produced annual reports to Faculty Council that described the most recent entering class along many dimensions. Dean Panter said that these profiles would be posted on the CRNS Sakai site following the meeting.

Professor Kosorok also asked for a summary of the complaint that had been filed against the University regarding its admissions policies and practices. Mr. Farmer said that he would post the complaint and the University's response on the Sakai site.

Dean Douglas Shackelford asked whether the law as currently interpreted allowed the use of race or ethnicity only if the University was certain that no other approach would work. Professor Holning Lau responded that the answer was not entirely clear, given the Court's decision to consider *Fisher vs. Texas* for a second time. Dean Panter said that she believed it was important to remember that the law as currently interpreted permitted the University to consider not only whether an alternative would yield acceptable results but also whether it would be reasonable or workable.

Dean Shackelford asked whether it was the job of the CRNS to make sure that the University carefully considered all potentially viable race-neutral strategies, so that promising strategies could be adopted if they proved to be effective and workable. Mr. Farmer said that he agreed with this interpretation of the CRNS's charge.

Dean Panter observed that it would also be important for CRNS to keep in mind the values of the institution, such as its commitment to treating all individuals fairly and with respect and its conviction that students need to live and study alongside classmates from different backgrounds so that they can prepare for life in an increasingly diverse and interconnected world.

Professor Lau asked whether the Working Group on Race-Neutral Alternatives had found any such workable strategies. Ms. Barbara Polk said that the Working Group had found no alternatives. Dr. Jennifer Kretchmar said that the Working Group had approached the question objectively and with an open mind but that none of the alternatives tested had yielded both similar diversity and similar degrees of academic preparation. She added that research conducted across the country has generally concluded that there is no workable substitute for the limited use of race and ethnicity as one factor among many in a process of comprehensive, individualized, and holistic review.

Professor Kosorok asked whether anyone had examined the data to see whether alternative criteria or combinations of criteria existed that might serve as a proxy for race or ethnicity. Professor Patrick Curran observed that the question could be asked another way: do ten characteristics, for example, serve as a proxy for race, or does race serve as a proxy for those ten characteristics? He added that a focus on such characteristics might lead the University to measure diversity not in terms of the percentage of students who identify as part of a particular group but instead in terms of the percentage who evince a particular characteristic or combination of characteristics.

Dean Panter observed that discussions about the student body would hinge on the group's understanding of the kind of student body the University needs. She listed several desirable characteristics of students: leadership; creativity; scholarship; a service mentality; extracurricular achievement; and varied life experience.

Professor Curran added the attributes of perseverance, character, and moral awareness. He said that he appreciated the variety among UNC students. He also observed that other important

questions involved the University's purpose and the kinds of graduates that the University hoped to produce.

Professor Lau said that he believed the University wanted a student body that creates an environment that maximizes the chances of success for every student. He added that, in order to maximize the chances of success for every student, the University needs to create an environment that allows subordinated groups to participate freely and individually and not as representatives of a group or type.

Dr. Bettina Shuford said that research suggests that the benefits of diversity in the student body include greater cognitive success and greater engagement in the life of the campus. Professor Kosorok observed that another benefit was the ability to build community.

Dean Panter said that each student's academic experience at the University is enhanced by greater diversity. Professor Curran stated that he believed every student's experience is enhanced by the University's enabling them to prepare for life in a diverse world.

Dean Panter noted that the CRNS would be meeting again near the start of the Fall semester. After thanking everyone for serving, she adjourned the meeting at 11:05a.

Committee on Race-Neutral Strategies Meeting of August 31, 2016 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Guests present: Stephen Keadey, Associate University Counsel; Kara Simmons, Associate University Counsel.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 2:05p. Following introductions, Dean Panter entertained a motion to go into closed session so that the committee could consult with attorneys from the Office of University Counsel in order to preserve the attorney-client privilege. The motion was made, seconded, and passed unanimously. The committee entered closed session at 2:10p.

[NOTE: The following indented paragraphs, which summarize the closed-session consultation, are to be redacted in any public disclosure of these minutes.]



Privileged



Privileged

Privileged

In open session at 3:08p, Dean Panter said she believed that CRNS should form two groups. One group would identify possible alternatives, beginning with the previous report of the Working Group on Race-Neutral Alternatives but continuing to an up-to-date scan. A second group would focus on methodology—that is, what datasets and other information CRNS might need to evaluate objectively any alternatives it chose to consider. She said that CRNS would be looking at alternatives from the point of institutional effectiveness and not in regard to the lawsuit that has been filed against the University.

Mr. Farmer said he believed it was crucial for CRNS to operate independently from the admissions office, so that it could provide the best possible advice regarding possible changes in practices.

Professor Curran said he believed it would be helpful to CRNS to understand how the University currently evaluates undergraduate candidates. Mr. Farmer said the admissions office would provide deidentified applications for CRNS in advance of its September 9, 2016, meeting. In response to a question from Dean Panter, Mr. Farmer also said he would also provide the definition of student success developed by the Retention Working Group, as well as the 2015 reading document form the admissions office, which describes how candidates were evaluated.

Dean Panter adjourned the meeting at 3:30p.

Committee on Race-Neutral Strategies Meeting of September 9, 2016 Minutes

Committee members present: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Guests present: James W. Dean, Jr., Executive Vice Chancellor and Provost.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10a. She asked Provost Jim Dean to share his thoughts about the work of the committee.

Provost Dean said that the University is obligated by law to consider alternatives to any use of race or ethnicity in its admissions policies and practices. He also said that the University is obligated, both legally and as a matter of sound practice, to assess, measure, and improve its delivery of educational benefits to its students, including the educational benefits of diversity.

He said that the University, broadly speaking, prepares students to succeed in their lives, and specifically in their economic, civic, and personal lives. The educational benefits of diversity are crucial in preparing students in all three of these spheres. Because students will be working in an increasingly complex and multicultural world, their success will depend on their ability to understand, learn from, and work with individuals from many different backgrounds, whether they end up leading companies, contributing to teams, or starting new businesses. Diversity in our classrooms, residence halls, and other learning environments helps students develop these skills.

In regard to success in civic life, the University is obligated to prepare students to contribute to society, and students with little or no experience of diversity are ill prepared to be informed voters and to participate meaningfully beyond voting in the political process. In regard to personal success, the University aims to help students prepare for lives as family members, neighbors, and friends, and the educational benefits of diversity help students fulfill these personal responsibilities.

The Committee then discussed the ways in which the experience of diversity contributes to critical thinking, and the ways in which critical thinking in turns contribute to success in all three of these spheres and to the development of cognitive skills more generally. One member observed that the third sphere is in effect a form of character development, and that research has demonstrated the importance of patience, persistence, and empathy in the formation of character. Another member noted that ample research in business has demonstrated the greater effectiveness of teams that are more diverse in comparison to teams that are less diverse. Another observed that there is empirical evidence that the experience of diversity helps erode implicit bias. Another explained that non-diverse teams have developed products that failed because they did not adequately account for the needs and preferences of their market, which was much more diverse.

Another noted that an investment in diversity, broadly construed, is an investment in human capital: not only in the identification of talent no matter where it may be found, but also in the development of talent once it has been found, by bringing people together whose varied backgrounds and perspectives help all members of the group learn more than they otherwise would learn.

In response, Provost Dean said that the University wants every member of the campus community to thrive, and the community as a whole to flourish. UNC, as the first public university in our country, has a responsibility to all. He also said that admission is just the beginning: the University strives to have all students learn from, work with, and benefit from each other.

A member asked whether it would be possible to think of a willingness to interact with others—to be a "boundary spanner," in the words of a former faculty member—as a criterion in admissions. Stephen Farmer said he believed that admissions officers already look for such a quality in candidates and could emphasize the trait more heavily if the faculty wished for them to do so. Another member suggested that such students could help in the development of other students who have potential in this area but have not yet enjoyed the same opportunities to practice this skill.

Following the discussion with Provost Dean, the Committee approved the minutes of August 31, 2016.

Barbara Polk then invited questions about the 2015-2016 reading document, which the members had received in advance (and which follows these minutes as an attachment). In response to a question about how the admissions office reconciles the inherent subjectivity of admissions decisions with the need to be rigorous and fair, the committee discussed the ways in which members of the admissions committee exercise their judgment as individuals even as they learn from and calibrate with one another through committee discussions and other forms of feedback. The committee discussed how ratings are calibrated, with Ms. Polk observing that, while these ratings may describe various attributes of candidates, they do not define them or dictate their decisions.

A member of the committee observed that admissions decisions need to be both rigorous and subjective, and that the questions are how to optimize the process and what results the process should try to achieve.

Dean Panter adjourned the meeting at 11:30a.

Committee on Race-Neutral Strategies Meeting of October 14, 2016 Minutes

Committee members present: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:05a. She asked Dr. Jennifer Kretchmar to summarize for the committee the report of the group previously charged with assessing possible race-neutral alternatives in admissions, which the members had received in advance (and which follows these minutes as an attachment).

The committee discussed the literature review that comprised part of the report. Published studies about the elimination of race-conscious admissions practices and/or possible race-neutral alternatives to those practices have tended to fall into three broad categories: how changes would affect (a) applicant behavior, (b) student diversity, and (c) academic quality. Some of the studies have relied on actual results from states—for example, California or Texas—that have proscribed any use of race or ethnicity in admissions. Other studies have attempted to simulate or model the impact of possible changes.

Regarding impacts on applicant behavior, studies have generally suggested that schools which eliminate the use of race or ethnicity have tended to experience declines in applications from underrepresented students. The results regarding other behaviors that might be interpreted as signs of interest on the part of prospective students—for example, the sending of standardized test scores—have reportedly been mixed.

Regarding impacts on student diversity and/or academic quality, studies have generally found that, in states where the use of race has been proscribed, no satisfactory substitute has been found, with some studies suggesting that declines in the enrollment of underrepresented students following the elimination of limited race-conscious practices have been greater for public flagships universities than for other institutions. Most studies reviewed as part of the prior

literature review suggested that no simple substitute has yielded or would likely yield equivalent racial and ethnic diversity and equivalent academic quality.

Drawing upon the prior literature review, the committee discussed the data and techniques that have been used to simulate or model the effect of changes in admissions practices—for example, high-school grades; test scores; a lottery for students who meet threshold academic credentials; emphases on obstacles overcome or on attendance at low-performing high schools. Since the prior literature review was conducted, the University of Colorado at Boulder has established an academic index that includes some weighting for disadvantage and/or obstacles overcome.

The committee discussed the importance of building upon the previous literature review by exploring the results at Colorado-Boulder and other recent published findings regarding the impact of race-neutral alternatives that have either been adopted or studied elsewhere. The committee also briefly discussed results at the University of Florida, which has reportedly benefited from the Bright Futures Scholarship.

The committee questioned whether race-neutral strategies might be easier to implement and more effective in maintaining diversity and academic standards in schools that are not highly selective. In this discussion, however, the committee recognized the University's obligation to consider race-neutral strategies. The members agreed that the committee's exploration of possible alternatives would need to be grounded in the particulars of the University's mission and market for prospective students, as well as in the specific constraints within which the University must operate—for example, the limit on non-resident enrollment in the first-year class, or the state of P-12 education in North Carolina.

Regarding its own modeling of possible impacts in the admissions process at the University, the committee discussed the difficulty of inferring causality outside the limits of a true experiment with randomly assigned participation. The committee also discussed the importance of approaching its modeling as fundamentally an exploration of how the University's academic environment can be maintained or enhanced, given the importance to that environment of diversity of all kinds within the student body and of strong preparation and potential among students. The members again discussed the obstacles that the current limit on non-resident enrollment might present both to the modeling of admissions practices and to changes in those practices.

The committee then discussed the data elements that might be available for the modeling—for example, nine-digit zip codes, enrollment at high-need high schools, and other possible indicators of socioeconomic challenges. In response to a question about the descriptive ratings assigned to candidates by members of the admissions committee in the course of their comprehensive and individualized evaluations, Ms. Barbara Polk reminded the members that these ratings are intended to describe what an evaluator sees in an application, not to determine the admissions decision.

The committee discussed at length the difficulty of modeling possible impact of changes on applicant behavior. For example, the School of Nursing experienced increases in applications

from underrepresented students when it stopped requiring candidates to submit results from the Graduate Record Examination; how might the committee assess whether undergraduate candidates would behave similarly if the public university system permitted the University to eliminate the testing requirement for undergraduate admission?

Dean Panter suggested that the committee divide into smaller groups so that the committee as a whole could continue to make progress in its identification and evaluation of possible race-neutral strategies. Professor Patrick Curran agreed to collaborate with Professor Michael Kosorok to convene a group that will focus on quantitative tasks and modeling, with Dr. Kretchmar to serve as staff liaison. Dean Panter emphasized that the group's modeling should attempt to assess the impact on both the diversity and the academic quality of the entering class, given the significance of both characteristics on the academic environment at the University and the education provided to all students. The committee discussed whether the group might attempt to identify primary, secondary, and tertiary impacts of any change in practices.

Dean Panter suggested a second group to update the literature review and agreed to ask Professor Holning Lau to convene the group, with support from students in the School of Law and graduate students in the Department of Psychology and Neurosciences.

Dean Panter asked Dr. Bettina Shuford to convene a third group focused on gathering the perspectives of current students on their educational experiences at the University.

Dean Panter adjourned the meeting at 11:30a.

Committee on Race-Neutral Strategies Meeting of November 30, 2016 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 3:34p. She welcomed Jonathan Engel, a member of the Advisory Committee on Undergraduate Admissions, as a new member of the committee.

The minutes of the meetings of September 9, 2016, and October 14, 2016, were approved with no corrections.

Dean Panter reminded the members that they had previously agreed to be divided into several subcommittees and asked Professor Patrick Curran to discuss the work to date of the subcommittee on data analytics. Professor Curran reported that he and co-chair Professor Michael Kosorok had discussed the draft charge of the subcommittee and the plan of work. Two approaches are under consideration: (a) computer-simulation methodology—for example, Monte Carlo designs; and (b) detailed modeling using existing data. Graduate students will be recruited who will both contribute to the studies and benefit from their participation. Specific goals, timelines, and deliverables need to be established.

The committee discussed theoretical constructs that might frame the work of the subcommittee. A true Monte Carlo simulation could allow the subcommittee to consider not only the students who actually applied for admission but also those who might apply if the University's admissions practices changed. A simpler simulation could model the impact of changed admissions criteria on the admissions decisions of students who in fact applied. The members agreed that it would be important that the diverse perspectives of the committee members help shape the work of the subcommittee, since the co-chairs represent two fields and two possible approaches and since other fields and approaches would help make the study more effective.

The committee agreed that the aim of the subcommittee will be to engage in a serious, good-faith effort to identify workable race-neutral alternatives that would maintain or enhance both the diversity and the quality of the undergraduate student body. One deliverable will be several detailed models that will help the committee assess the possible impact of different race-neutral practices. If possible, these models will assess the impact of each potential practice not only on the entering class as a whole but also on specific academic programs and classes.

Mr. Stephen Farmer stated that the admissions office will adopt any alternative or combination of alternatives that can be proven to be workable and effective in maintaining or enhancing both diversity and quality.

The members discussed again the final report of the campus-wide working group that previously explored possible alternatives to race-conscious practices, agreeing that the report was valuable and offered a strong base for the subcommittee on data analytics.

After Dean Panter asked Dr. Bettina Shuford to describe briefly the work of the subcommittee on the impact of diversity on the student experience, the committee discussed the connection between the educational benefits of diversity and possible changes in the undergraduate student population. The members agreed that existing survey responses and other evidence will help them better understand the extent to which the composition of the student body is helping the University deliver these educational benefits. They also agreed that it will be important for surveys to assess the extent to which students of different backgrounds, including different racial and ethnic backgrounds, are interacting with and learning from one another and thus realizing the educational benefits of diversity.

Professor Holning Lau then reviewed plans for the subcommittee that will focus on reviewing existing literature, whose purpose will be to identify published studies that can inform the work of the other subcommittees, and especially the subcommittee on data analytics. For example: What studies have been published since the report of the previous working group that considered alternatives to race-conscious practices, which itself included an extensive review of the literature extant at the time? What other recruitment and admissions policies have schools developed that might serve as workable and effective alternatives to current practices? Have any studies been published or briefs filed that discuss variables that should be considered in our modeling?

Dean Panter emphasized that the subcommittees should identify what resources they will need in order to do their work well. She said that the University will support these efforts because they are important.

Dean Panter adjourned the meeting at 5p.

Committee on Race-Neutral Strategies Meeting of December 16, 2016 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:30a.

Dr. Bettina Shuford reported on of the efforts of the group focused on gathering the perspectives of students on their educational experiences at the University. The group is collecting information from previously conducted studies and surveys. The group also hopes to receive, at some point in the next few months, information from the campus-climate survey that was conducted last year by the Division of Workforce Strategy, Equity, and Engagement.

Professor Holning Lau led a discussion of a possible charge for the group focused on updating the extensive literature review that the Advisory Committee on Undergraduate Admissions received during the 2015-2016 academic year. The group will be hiring research assistants to help with the work. The committee discussed the importance to both Dr. Shuford's and Professor Lau's groups of exploring how other aspects of identity—for example, sex or gender—might intersect with race or ethnicity.

Professor Patrick Curran described the work to date of the group focused on modeling and other quantitative assessments and tasks. Since the last meeting on November 30, the group has secured useful data and data summaries from the Office of Undergraduate Admissions. The committee discussed the possible use of data available from other sources—for example, the National Student Clearinghouse—as well as other data, such as Advanced Placement results and parent occupation, that might be available from University sources. The committee also discussed the possible importance of assessing where denied students were admitted and chose to enroll—a step that might improve or at least inform the assessment of future candidates. Dean

Douglas Shackelford observed that similar analyses in the Kenan-Flagler Business School have suggested that some competitor institutions may be weighing some criteria—for example, standardized test scores—less heavily, raising the question of whether the competitor schools know something that UNC does not know.

The committee the discussed Dean Panter's previous study, with Professor Emeritus Charles Daye, of the educational benefits of diversity for law students. The long-term study found that a racially diverse law study body provides educational benefits for students, including the benefit of being exposed to a diversity of viewpoints, which enables students to become more effective lawyers.

Dean Panter adjourned the meeting at 11:20a.

Committee on Race-Neutral Strategies Meeting of February 8, 2017 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:30a.

Professor Patrick Curran reported for the group focused on modeling and analytics. After praising the work of Dr. Jennifer Kretchmar in providing secure access to data, he noted that the group has identified a list of initial variables to be used in modeling and analysis and expects to identify more in the near future.

The committee discussed a possible structure for compiling descriptive statistics, noting the difficulty of doing justice to the multiple ways in which students identify and think of themselves. Federal guidelines impose a structure for reporting to the Department of Education, and although this structure has its advantages, it may also have the potential to obscure information that students and others may consider important. Other structures may be useful for the work of the modeling group, but the possible value of those structures will need to be weighed carefully against their complexity.

The committee discussed the ways in which the lack of cutoffs or thresholds in the current admissions process complicates the modeling of alternative processes. The committee agreed that the group should evaluate the impact of possible cutoffs on the quality and diversity of the undergraduate student body, and that the admissions office should consider implementing any that might prove effective. The committee also agreed that wrestling with questions of measurement and modeling will likely yield significant benefits for the University.

Professor Holning Lau reported that he had identified possible research assistants for the literature review.

Dr. Bettina Shuford reported that the group focused on students' experiences of diversity had identified at least ten previous studies and surveys from which the group will be extracting relevant data. The aim of this exercise will be to understand how students are perceiving and engaging with their environment and how they are benefiting educationally from the diversity of the student body, broadly construed.

Dean Panter adjourned the meeting at 11:30a.

Committee on Race-Neutral Strategies Meeting of March 1, 2017 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences. Holning Lau, Professor, School of Law; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School

Staff members present: Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Staff members absent; Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions

Dean Abigail Panter, chair of the committee, called the meeting to order at 3:35 PM.

Minutes of the February 8, 2017 meeting were reviewed and approved.

Professor Michael Kosorok reported that he is drafting a data agreement for a graduate student. Professor Patrick Curran will also be working with the same student. It was also reported that Professor Holning Lau will be working with two graduate students on literature and modeling reviews. Dr. Jennifer Kretchmar will draft a notice of confidentiality for these graduate students.

Professor Patrick Curran presented an update on his research based on an admissions candidate's ability to indicate multiple races or ethnicities. Professor thanked Dr. Kretchmar for her assistance with this project. Professor Curran also provided data tables to reflect his work in this area.

In his data review, Professor Curran removed a number of students from the initial data sample since these students never completed the application process. As the data was reported, the committee members discuss the various ways applicants can identify themselves by race, ethnicity, fee waiver, first-generation college and residency status. Based on this conversation, Professor Curran will refine his data report. He also emphasized that this preliminary report is only an early step in his research. He will continue to work with Professor Kosorok and their graduate student to produce potential outcomes for a race-neutral approach to admissions.

Associate Vice Chancellor Shuford provided an update on the work of her sub-working group. She indicated that this sub-working group is focused on questions related to engagement, perceptions of campus climate, social development and learning outcomes. Dean Panter offered to provide this group with the results from exit surveys completed by graduating students.

Dean Panter adjourned the meeting at 4:46 PM.

Committee on Race-Neutral Strategies Meeting of April 5, 2017 Minutes

Committee members present: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Guests present: Stephen Keadey, Senior University Counsel, Office of University Counsel; Joseph Shuford, Post-Doctoral Trainee, Office of University Counsel.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:35a. The minutes of the meeting of March 1, 2017, were approved with minor corrections.

Following introductions, Dean Panter entertained a motion to go into closed session so that the committee could consult with attorneys from the Office of University Counsel in order to preserve the attorney-client privilege. The motion was made, seconded, and passed unanimously. The committee entered closed session at 10:40a.

[NOTE: The following indented paragraphs, which summarize the closed-session consultation, are to be redacted in any public disclosure of these minutes.]



Privileged

Dean Panter asked members of the three working groups to report on their progress. Professor Lau said that he would be interviewing student candidates to help with the literature review and that the successful candidate will be expected to work full-time on the project over the summer.

Dr. Shuford said that the committee on student engagement has been meeting to identify pertinent questions in the various survey instruments that are currently available. The committee also plans to talk with faculty about the state of research regarding student engagement with diversity.

Professor Curran and Professor Kosorok discussed the progress of their data analysis. A graduate assistant is currently working on the project and is becoming acquainted with the variables that are available. The student will be available to work during the summer and into the fall while Professor Curran is on research leave. The committee also discussed a recent published paper regarding the measurement of diversity that has limitations but nevertheless could be useful for assessing diversity over time.

Dean Panter asked whether there were any other issues the committee wished to discuss. The members asked about the timelines for their various working groups. Dean Panter responded by noting that the evaluation of race-neutral strategies was an ongoing institutional responsibility and by asking everyone to work at a steady, professional, and sustainable pace.

The members closed by agreeing that they would revisit the charges for the various working groups at the next meeting, as a way of ensuring that everyone's work remains consistent with their charges.

Dean Panter adjourned the meeting at 11:45a.

Committee on Race-Neutral Strategies Meeting of May 12, 2017 Minutes

Committee members present: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Guest present: Damon Toone, Associate Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:35a. The minutes of the meeting of April 5, 2017, were approved with no corrections.

Dean Panter asked members of the three working groups to report on their progress. Reporting for the literature-review group, Professor Lau said that he is working on an updated charge for the committee to consider and if possible approve. A research assistant was hired for 30 hours of work during Spring 2017 semester; a new assistant will begin soon and will work full-time during the first half of the summer. The previous research assistant completed a draft summary regarding discussions in court documents about the types of studies a university could conduct to assess possible race-neutral strategies; Professor Lau said that this summary is a draft only and that he has not yet had the opportunity to review it. He also said that the literature review from this point forward may also explore how diversity can be more effectively measured, especially in light of the uniqueness of individuals and the diversity within diversity that results from their uniqueness.

Professor Patrick Curran reported that the modeling and data-analysis group has developed infrastructure for statistical and data analyses and is now ready to begin applying theoretical constructs to the data to see what results those constructs generate. He observed that this infrastructure will allow his group to test some of the alternatives suggested by the literature review that others have either used or developed in theory.

Dr. Bettina Shuford said that the group focused on student engagement continues to explore data from existing surveys, including those regarding campus climate, student engagement, psychosocial development, and learning outcomes regarding diversity. She observed that, since the last meeting of the committee, the University has explored contracting with a national multi-institution study of leadership, and that this contract might permit the group to conduct multi-institutional research regarding possible correlations between diversity at colleges and universities and various outcomes. The group is also exploring whether a recently published book regarding how colleges affect students might be helpful.

The committee discussed whether the University collected information about students' countries of origin. Mr. Stephen Farmer said that the information, as well as the tribal affiliations of students who identify themselves as American Indian or Alaska Native, might be available through the Common Application for recent years but is not in the flat file. Mr. Farmer also said that the admissions office found it helpful to look beneath the surface of the various categorizations that colleges and universities are required to report to the U.S. Department of Education. Where modeling and data-analysis are concerned, it may be necessary to start with these broad required categorizations and then narrow using other information.

The committee then discussed in greater detail the work of the data-analysis group. Professor Michael Kosorok described an initial plan for analysis that the group intends to follow using information from previous applicants to the University stored in the flat file. This first pass will include information regarding socioeconomic status and gender, as well as information that an applicant may have provided about his or her race and ethnicity, along with academic variables provided by the student or his or her school. The committee discussed the complexity of these academic variables and the implications of their complexity for these first analyses. For example, where the strength of an applicant's high-school curriculum is concerned, should the analysis focus simply on what students have taken in high school, or should it focus instead on what they have taken in the context of what their schools offer?

The committee also discussed a limitation of using standard logistic regression to explore these variables: because all of them interact with other attributes and circumstances, the variables are not necessarily what they may seem to represent. As a result, the group intends to use other methods to conduct the first-pass analysis, including machine learning. Although there are still some complications to be resolved with the data, these approaches will allow the group to conduct multiple simulations to test various approaches to admissions and their likely impacts.

The committee members agreed that all were comfortable with this plan as a first pass. The committee discussed longer-term efforts to join admissions data with data from other sources—for example, census-block data. The ultimate goal of the simulations is to determine whether there is a race-neutral method accessible to the University that would yield equivalent or better results.

Dean Panter adjourned the meeting at 11:52a.

Committee on Race-Neutral Strategies Meeting of September 12, 2017 Minutes

Committee members present: Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences (on leave Fall 2017); Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Associate Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:05a. After the committee members introduced themselves, Dean Panter presented the agenda for the meeting.

Professor Holning Lau reported that he worked with his research assistant over the summer to review current literature regarding possible race-neutral strategies and asked for feedback from committee members regarding the direction of the review. Five major categories of race-neutral strategies, either proposed in theory or actually deployed at various universities, have been revealed so far. According to the literature, all were consciously designed to foster racial and ethnic diversity but are facially race-neutral and thus are considered by at least some observers to meet a reasonable standard for neutrality. The five categories are:

1. Existing percent plans. Several schools and systems have deployed such plans. The example of the University of Texas at Austin may be the most relevant since some of the other plans have been system-wide. Some research suggests that UT-Austin was able to maintain some rough level of overall diversity with top X percent plan as before; other research suggests that, to the extent the school was able to maintain comparable diversity, this result stemmed more from substantial demographic changes—in particular, the growth of the Hispanic population—than from the effectiveness of the top X percent plan itself. Researchers have noted, moreover, that in the Fisher decision, the United States Supreme Court focused on diversity within classes, departments, and schools, not just on overall diversity within the entire student population, and acknowledged that mechanical top X percent plans may result in the unintended and unacceptable tradeoff of losing other kinds of individual and nuanced diversity, as well as academic preparedness. There generally seems to be few if any peer-reviewed publications on top X percent plans after 2013.

- 2. Socioeconomic approaches. The review revealed that some have suggested that a "preference" for students from low-income households would contribute to socioeconomic diversity and might also serve to maintain to racial and ethnic diversity. In general, researchers have not found that weighing socioeconomic status more heavily in the evaluation of candidates would by itself increase racial and ethnic diversity. One writer has encouraged attention to two indicators of socioeconomic status, one for candidates as individuals and a second for their contexts—for example, their schools and neighborhoods. The literature suggests that, although some colleges and universities are already considering such factors, few have developed formal methods for assessing and assigning weight to them. One exception is the University of Colorado at Boulder, which reportedly has compiled a disadvantage index based on personal and school attributes. Beyond this natural experiment at Colorado, most studies of socioeconomic-status plans are based on simulations, and most simulations suggest that SES preferences alone cannot give the same level of racial and ethnic diversity as race-conscious practices. One other challenge noted in the literature is that the simulations have not been demonstrated to be practicable. Moreover, to the extent that simulations assume that zero weight is currently being assigned to socioeconomic status, they may oversestimate the difference that more weight or more formalized weighting might make. Some studies have focused on cultural diversity in a way that is facially race-neutral; none found so far describe the secondary effect of increased attention to cultural diversity on racial and ethnic diversity.
- 3. <u>Eliminating legacy preferences</u>, <u>development preferences</u>, <u>and early-decision and -action programs</u>. Some research has suggested that eliminating all of these practices would yield some increase in racial and ethnic diversity. None has demonstrated that doing so would maintain the same level of racial and ethnic diversity schools are currently achieving. Some studies have noted the tradeoffs that eliminating these practices would involve.
- 4. <u>Race-neutral holistic review</u>. The literature has noted that some schools claim to be blind to race and ethnicity in admissions but still take into account essays and other attributes that may either indicate or serve as a proxy for race or ethnicity.
- 5. <u>Recruitment</u>. Although some have suggested that enhanced research can substitute for race-conscious practices in the evaluation of candidates, and although many schools have expanded recruitment for that purpose, the literature suggests that enhanced recruitment has not by itself been able to produce comparable levels of racial and ethnic diversity.

Professor Michael Kosorok then described the work of the group that is focusing on data analysis and simulations. Based on initial evaluations, the race or ethnicity of underrepresented-minority candidates seemed not to predict substantially students' admissions decisions, although the study so far has not been able to define clearly the interaction among variables. Subsequent analyses will pay more attention to residency and other factors.

Dean Panter adjourned the meeting at 11:02a.

Committee on Race-Neutral Strategies Meeting of September 26, 2017 Minutes

Committee members present: Holning Lau, Professor, School of Law; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences (on leave Fall 2017); Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Senior Assistant Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 11a. In the absence of a quorum, the minutes of the meeting of September 12, 2017, were reviewed preliminarily, but revisions were postponed until the next regularly scheduled meeting. Mr. Stephen Farmer noted that the minutes were drafted to be revised and that any revisions the committee agreed upon would be noted in the final version.

Dean Panter relayed a message from Professor Michael Kosorok. The data-analysis group will be adding adjustments for residency status and exploring further the interactions between the variables it has identified.

Dr. Bettina Shuford reported for the group that has been focusing on reviewing existing surveys of the student experience of diversity. She noted that the University has access to several instruments, including the Multi-Institutional Study of Leadership and the Survey of Student Experience in the Research University. The group is also exploring existing surveys of the sophomore experience and the senior experience, which are administered by the public university system, and a survey of student engagement administered in the residency halls. Across all of these surveys, the group is looking at evidence regarding campus climate, psychosocial development, and student engagement.

Dean Panter mentioned that the University will likely be piloting an exit interview for graduating seniors starting this year and that the new interview will include an enhanced version of the current first-destination survey. The interview will also include questions about the educational benefits of diversity as outlined in *The Educational Benefits of Diversity and Inclusion for*

Undergraduate Students at the University of North Carolina, which Provost James W. Dean, Jr., submitted to Chancellor Carol L. Folt in May 2017.

Dr. Shuford said that her group will be presenting a preliminary summary of what it has learned later this fall. The group has been especially interested in ideas involving perceptions of the campus climate (including the psychological climate, behavioral climate, and organizational climate), we well as students' sense of belonging and mattering. Dr. Shuford noted that studies have found a sense of social connectedness and a sense of diverse citizenship as being important to students' thriving. She also noted that, whereas studies have in the past focused more on the impact of the environment on students, they are now beginning to focus on the capacities of students and on their shared responsibility—with faculty, administration, and staff—to be together responsible for student success.

In response to a question about whether the group had identified any research regarding possible disparate impacts of class size on the success of different student populations, Dean Panter responded that research suggests the pedagogical approach, rather than the sheer size of the class, that can lead to better or worse outcomes.

In response to a question about whether the group had seen any evidence in the literature about the effect of critical mass(es) on campus climate, Dr. Shuford responded that some studies have suggested better outcomes with more students in a particular group. Regardless of the numbers of students, the behavior and practices of faculty and staff remain important. Research suggests that schools need to pay careful attention to climate, not only to representation, in order to secure good outcomes for students.

The group discussed whether assessing the capacity of students to contribute to and benefit from some of these outcomes would be a reasonable approach for admissions evaluations. Professor Holning Lau said that qualitative assessments—for example, essays—might offer more insights than quantitative-only assessments such as top-X-percent plans. An assessment could try to discern the propensity of a student to act in ways that would contribute or benefit.

Dean Panter adjourned the meeting at 12p.

Committee on Race-Neutral Strategies Meeting of November 27, 2017 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Holning Lau, Professor, School of Law; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Ming Lin, Parker Distinguished Professor, Computer Science, College of Arts and Sciences.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Associate Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Guest present: Belinda Locke, Coordinator for Assessment and Strategic Planning, Division of Student Affairs.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:05a. After introductions, the committee heard from Dr. Bettina Shuford and Dr. Belinda Locke regarding the work of the group that has been focusing on the student experience of diversity. Dr. Shuford distributed a revised review of the literature regarding theoretical constructs related to student engagement, campus climate, and psychosocial development. Dr. Locke then distributed and discussed preliminary results of an attempt to model the extent to which various components of students' experience of diversity correlate with positive outcomes in the areas of leadership and self-awareness. This first attempt uses data from 2015; other data could be explored in the future, as could other positive outcomes such as strengthened resiliency and improved complex cognition. This first attempt found no significant differences across different racial and ethnic groups in students' sense of belonging but significant differences in perceptions of a possible discriminatory climate on campus.

The committee discussed the work of Sylvia Hurtado and others, which has found that a learning environment characterized by structural diversity leads to improved sense of belonging, increased interactional diversity, and improved educational outcomes; the Multi-Institutional Study of Leadership and/or the Student Experience in the Research University Consortium may be developing a structural diversity index for participating institutions, which could make it easier to explore Hurtado's findings across multiple schools. The committee then discussed various approaches for subsequent versions of the model, as well as alternative methods that might in time provide complementary insights.

Professor Holning Lau reported that he and his research assistant had surveyed the limited literature regarding the use of application essays as a race-neutral strategy. Most legal scholars consider such a use to be Constitutional, given recent decisions that consider facially race-neutral practices to be permissible under the law. The approach does receive substantial criticism in the literature, mainly on three grounds: first, some critics believe essays are inedequate as a means of fostering student diversity unless they are accompanied by other practices that allow for the explicit consideration of race or ethnicity as one factor among many; second, applicants do not know how to respond to essay prompts, with some believing that the "right" thing to do is not to mention race or to downplay it, no matter the role that they might believe race has played in their lives; third, reliance on essays may discourage and disadvantage candidates from lower socioeconomic groups, since students from higher groups may be more likely to have received effective instruction in writing or to be "coached" as to the "right" response. The literature does, however, include some praise for essays, noting that they can be an important way of providing qualitative information about students' experiences of race that can help foster diversity within races.

The committee discussed the difficulty of writing prompts for application essays, as well as the possibility that prompts can change student behavior in unexpected ways. The committee also discussed the difficulty in understanding essays in the absence of other contextualizing information, including, in some cases, the race or ethnicity of the writer. Professor Lau noted that one challenge in assessing the effectiveness of essays as a means of fostering diversity is that most schools that are using essays have adopted many other practices—for example, recruitment practices—that are intended to accomplish the same end; in such an environment, it is difficult to isolate the difference that the essays themselves are making.

Professor Michael Kosorok and Professor Patrick Curran described their ongoing work to establish a rough baseline model that predicts previous admissions decisions based on various data available in the admissions flat file. These data include credentials provided to the admissions office, such as high-school grade-point average and test score, as well as indicators that are the products of comprehensive review, such as ratings assigned by readers. The best model they have produced so far, which includes residency, predicts previous decisions with 91.9 percent accuracy, with 95.7 percent accuracy in predicting those not admitted and 81.9 percent accuracy in predicting those admitted. When race or ethnicity are excluded from the model, the accuracy of the model declines: from 91.9 to 91.0 percent overall, from 95.7 to 95.5 percent for those not admitted, and from 81.9 to 79.1 for those admitted. Professor Kosorok observed that these results suggest that race or ethnicity is playing a very limited role in admissions decisions.

The committee discussed the difficulty in determining whether race could be an underlying factor in some of the other variables that are part of the model—for example, in the ratings that admissions officers assign to essays, activities, and personal qualities.

The minutes of the meetings of September 12, 2017, and September 26, 2017, were reviewed and approved with no corrections. Dean Panter adjourned the meeting at 11:35a.

Committee on Race-Neutral Strategies Meeting of February 28, 2018 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School.

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Associate Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 3:30p. She asked members of each subgroup to summarize briefly the group's current thinking and share those thoughts with her within the next week.

Professor Holning Law provided an update about the literature review of possible race-neutral alternatives. One approach to consider is whether socioeconomic status might be weighed even more heavily than it is already weighed in admissions, although it would be important to be mindful of the tradeoffs, since more socioeconomic diversity could mean less of other kinds of diversity. The research suggests that a top-X-percent plan alone would not provide comparable racial and ethnic diversity and comparable academic quality. One simulation the modeling group might conduct would involve trying to replicate the results of previous studies conducted by the University. Even if a top-X-percent plan fostered similar racial and ethnic diversity, it might not yield other kinds of diversity—for example, diversity within racial and ethnic groups. All of the studies reviewed to date suggest that using socioeconomic proxies would not be as effective an approach as considering race and ethnicity as one factor among many. Where the use of essays is concerned, the research is inconclusive; there are no data so far to demonstrate that focusing on diversity-oriented essays would contribute to racial and ethnic diversity.

The committee discussed whether essays could be considered to be reinforcing conformity of thought, because the use of such essays in admissions could end up rewarding people who think in a certain way; alternatively, students could be coached to write in a certain way if they believed that doing so would benefit them in admissions. Some students of color might be reluctant to be honest about their experiences out of concern that their doing so might penalize them in admissions. Some students might simply not know what to make of a question about diversity. Students' self-perceptions can depend on their context and environment; a student

might not think consciously of his or her race or ethnicity or socioeconomic status, for example, until the student goes to college.

There is no support in the literature to demonstrate that outreach alone will maintain or strengthen diversity.

Professor Patrick Curran talked about the work of the simulation/modeling group, reporting that Professor Michael Kosorok, with the help of a graduate student, continues the group's work with admissions data. Empirical results to date do not suggest that any of the race-neutral alternatives explored would be effective. Nor is there any evidence to date that race or ethnicity is currently being used as a unitary or dominant factor in admissions; rather, the evidence suggests that race is a minimal but unique factor. The analysis to date suggests the complexity of racial and ethnic identifications; it is hard, using admissions data about racial self-identification alone, to get at the diversity that can be seen in the whole of the application. All of the evidence suggests that the admissions office is doing what it says. Professor Curran emphasized that the group is not saying that a "race-blind" approach would yield the same racial and ethnic diversity; rather, it is saying that the current decisions of the admissions office are complex and hard to model based on any one criterion alone. The data suggest that race is playing a subtle role but always in conjunction with many other factors.

The committee discussed the difficulty of implementing a race-neutral practice that used legal "proxies" for race and ethnicity unless the practice was rigid and formulaic and not a product of individual reader judgment of individual human applicants. Although there is a disconnect between the deterministic nature of data-intensive simulations and the holistic nature of UNC's current process, and although there is some concern that a formula-based approach could be "gamed," it still might be helpful to try to simulate such an approach, as the previous committee on race-neutral alternatives did. Professor Curran observed that any simulation using current admissions data would not be able to take into account or predict the impact that a change in evaluation practices might have on the applicant pool.

Dr. Bettina Shufort reported for the group that is reviewing student perceptions of diversity. She and Dr. Belinda Locke in the Division of Student Affairs have reviewed previous surveys, pulled some of their data, and engaged with Professor Curran to model connections between perceptions and student outcomes. The general conclusion so far has been that race and ethnicity do have an impact on students' sense of belonging and on their leadership on campus. Professor Curran then discussed the "path model" and survey variables that lead to other variables; the results to date substantiate seem to substantiate the importance of diversity for our current students. Dean Panter observed that the law-school study she conducted demonstrated greater positive learning outcomes in institutions with greater diversity. Dr. Shuford observed that the literature on student thriving suggests that diverse interactions are crucial to thriving.

Dean Panter then asked the committee to review carefully the minutes of the previous meeting. The minutes were subsequently approved with one correction. Dean Panter adjourned the meeting at 5p.

Committee on Race-Neutral Strategies Meeting of April 9, 2018 Minutes

Committee members present: Patrick Curran, Professor, Psychology and Neuroscience, College of Arts and Sciences; Holning Lau, Professor, School of Law; Abigail Panter, Professor, Psychology and Neuroscience, and Senior Associate Dean for Undergraduate Education, College of Arts and Sciences; Douglas Shackelford, Distinguished Professor and Dean, Kenan-Flagler Business School; Bettina Shuford, Associate Vice Chancellor, Division of Student Affairs.

Committee members absent: Rumay Alexander, Clinical Professor, School of Nursing, and Special Assistant to the Chancellor; Jonathan Engel, Professor, Physics and Astronomy, College of Arts and Sciences; Michael Kosorok, Kenan Distinguished Professor and Chair, Biostatistics, Gillings School of Global Public Health

Staff members present: Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions; Jennifer Kretchmar, Associate Director of Undergraduate Admissions; Barbara Polk, Deputy Director of Undergraduate Admissions; Damon Toone, Associate Director of Undergraduate Admissions.

Dean Abigail Panter, chair of the committee, called the meeting to order at 10:30a. The minutes of the meeting of February 28, 2018, were reviewed and approved, with corrections.

Dean Panter shared a draft of an interim report, summarizing the activities and findings of the committee to date, that will go to the Advisory Committee on Undergraduate Admissions and through the Advisory Committee to others in the University community. She stated that she has been regularly informing the Advisory Committee of the committee's activities and findings since the committee was convened.

The committee discussed what details should be included in the interim report, given that the committee has completed much detailed work so far. The members agreed that the minutes of previous meetings should be incorporated, as should the report on the educational benefits of diversity completed by Provost James Dean last year, as well as the earlier report of the Working Group on Race-Neutral Alternatives. The members agreed not to include the reading document produced by the admissions office. The committee also agreed that the report should be consistently formatted.

The members discussed how to report on activities and findings that are still works in progress. They agreed that any findings that are preliminary and/or not conclusive need to be represented as such, and that one way of addressing this need would be to report future directions and planned next steps. Dean Panter said that she would compile suggestions in a revised document and share with them for their final review and approval.

Dean Panter invited the members to discuss what resources their subgroups would need for the next six months or so. The student-experience subgroup may need access to data from the

Student Experience in the Research University (SERU) survey. The analytics group might need the services of another research assistant, perhaps in quantitative psychology. Regardless, the committee will need to spend time further integrating work across the subgroups. For example, the analytics group, which has created a good infrastructure using data from previous applicants for admission, will want to test alternatives identified by the literature-review group. Professor Holning Lau agreed to consult with Professor Patrick Curran and Professor Michael Kosorok on which alternatives could be tested with existing data.

Dean Panter asked members to review sections of the interim report that involve their subgroups and also to summarize their plans for next steps for the groups.

The committee then discussed news reports regarding the U.S. Department of Justice's inquiry into early-decision practices at other schools. Mr. Stephen Farmer stated that the University practices early-action (rather than early-decision) admission and does not share applicant data with other schools.

Dean Panter adjourned the meeting at 11:55a.

Appendix D Educational Benefits of Diversity and Inclusion for Undergraduate Students Report

Dean, J. W. (2017). The Educational Benefits of Diversity and Inclusion for Undergraduate Students at the University of North Carolina at Chapel Hill.

The Educational Benefits of Diversity and Inclusion for Undergraduate Students at the University of North Carolina at Chapel Hill

Report Submitted
to
Chancellor Carol L. Folt
by
Executive Vice Chancellor and Provost James W. Dean, Jr.

May 26, 2017

Carolina's Commitment to Diversity and Inclusion

The University of North Carolina is committed to creating and sustaining a diverse and inclusive community of students, faculty, and staff. This commitment derives from our experience that our differences strengthen our educational programs, enhance the development of our students, and enable us to achieve our mission as a public university—one that strives for excellence in teaching, learning, creating, and discovering, and in serving all the people of North Carolina.

Diversity, Inclusion, and Excellence as Pillars of Our Mission

In the words of our current mission statement, adopted by the Board of Trustees and approved by the Board of Governors in 2009, UNC-Chapel Hill "embrace[s] an unwavering commitment to excellence as one of the world's great research universities." As "the nation's first public university," we exist to "teach a diverse community of undergraduate, graduate, and professional students to become the next generation of leaders," even as we "invest knowledge and resources to enhance access to learning and to foster the success and prosperity of each rising generation." We commit to these educational objectives in order "to enhance the quality of life for all people" in our state.

Inscribed within this mission is the conviction and proved experience that diversity, excellence, and service to the people of North Carolina are integrally and inextricably connected. The University puts into practice what a significant and growing body of educational and organizational re- search has established: that diversity enhances learning, fosters discovery, and strengthens service, especially in a community in which all individuals are valued for the unique combination of attributes that make them who they are. Of course, learning, discovery, and service require other re- sources, including intellect, integrity, and a capacity for hard work, especially if they are to be con- ducted at the highest possible level. But none would flourish without diversity and inclusion and the benefits that the two, taken together, provide.

This understanding—that diversity, inclusion, and excellence are mutually reinforcing pillars of our mission to achieve academic excellence and to prepare graduates to succeed and lead—has been embraced by our faculty for decades. As early as 1998, in its Statement on Principles of Service, Diversity and Freedom of Inquiry, the Faculty Council made explicit the connections among the three, affirming that the University had an obligation to "create and sustain an environment of educational excellence," "promote intellectual growth through intense and rigorous educational dialogue," and "foster mutually beneficial interactions among students, faculty, staff, and administrators who possess diverse backgrounds and wide varieties of perspectives and life experiences." These connections were further explored and defined in the 2003 and 2011 academic plans, the former stating explicitly that "Diversity is critical to the University's effectiveness in fully preparing students for the world," and the latter affirming "how much Carolina's learning environment is enhanced by students, faculty, and staff from multiple backgrounds and ethnicities interacting together." These themes were in turn echoed by Faculty Council in its November 2016 resolution, On Commitment to Diversity and Inclusion, which reinforced that "student body diversity is a vital and necessary component of academic excellence," and which enumerated several specific educa- tional benefits conferred by such

diversity. The 2016 resolution also noted the critical role that inclusion plays in securing the educational benefits of diversity, since "students from all backgrounds [need] to feel welcome, supported, and prepared for academic success" if they are to thrive academically and personally and contribute to the education of their classmates.

We hope this document will contribute substantially to this lived experience and ongoing conversation about diversity and inclusion on our campus, and to our continued development as a public university whose high calling is to strive for excellence in teaching, learning, creating, and discovering, and in serving all the people of our state.

It is worth noting that our understanding of these issues has changed and deepened over time. Although the University enrolled its first student in 1795, it was another full century until we enrolled our first female student, and another thirty years until we enrolled our first American Indian student, and another twenty until we enrolled our first black student. The student body at the University has changed dramatically since then—partly because our state and nation have changed, but also because those who came before us on this campus came to realize that the differences we had resisted were in fact crucial to the excellence we sought. Without their vision and wisdom, and without their sacrifice, the contribution we now strive to make would not have been possible.

Our Broad Commitment to Diversity and Inclusion

The University seeks, welcomes, and benefits from diversity in all its forms. No list can fully express the rich variety of backgrounds, experiences, identities, and perspectives that comprise our community, much less our state, nation, and world. We may focus on certain elements of diversity for good reasons, including current conditions or a sense of where our state and world are heading. This focus often leads us to describe diversity in terms of background, belief, and experience; socioeconomic status; race and ethnicity; veteran or military status; physical ability; sexual orientation; or sex, gender, gender identity, or gender expression. But we recognize that human experience and identity cannot be fully captured in any of these ways, and we respect and welcome other differences that likewise strengthen our academic programs and campus by enhancing our individual and collective learning experiences.

We also seek, welcome, and benefit from diversity in all its combinations. Rather than think of people categorically, we recognize that no person is one-dimensional and no two people the same in every respect, even if they identify with one another along a particular dimension. Although the University is often required to report categorically about elements of diversity in our student body and faculty, and although such reporting can offer important perspectives about our campus, we owe all members of our community the opportunity to be recognized as the capable and complex individuals they are, rather than reduced to a single identity or interest.

If this respect for difference, and for difference within difference, is a crucial component of inclusion, then inclusion itself is crucial to our ability to extend the educational benefits of difference to every member of our community. When people feel welcome to bring their unique combinations of experiences and backgrounds into their interactions with their students,

classmates, and professors, then discussions become richer, discoveries go deeper, and perspectives grow broader. This is the educational experience we strive to create, and it depends on both diversity and inclusion.

Our Commitment in Action

This commitment to diversity and inclusion—driven by our conviction that the two are integral to one another and to the excellence we seek as an institution—has most recently manifested itself in our recommendation regarding the new University Office of Diversity and Inclusion. This office will be charged to build understanding across differences, promote the free exchange of disparate ideas, and create conditions to ensure that the educational and social benefits of diversity are equitably realized. This office will also address the issues of our contemporary society and strive to position all students, faculty, and staff to reach their greatest potential. We believe that this vision is consistent with the University's experience and understanding of diversity and inclusion, and we are excited about the difference this office will make, over time, in the education of our faculty, staff, and students, and by extension in the life of our state.

But this is just one recent manifestation of the University's commitment to realize and secure the educational benefits of diversity and inclusion. This commitment has long been borne out in many other ways: in our work to attract and enroll outstanding students from widely diverse backgrounds, including, but not limited to, those from low-income households and those whose races and ethnicities are underrepresented on our campus; in our efforts, both in and out of the classroom, to foster debate, discussion, collaboration, and other engagement across differences; and finally, in our efforts to encourage success for students of all backgrounds, so that they will leave our campus prepared for the intellectual, civic, and personal challenges and opportunities they will face, and ready to make important contributions in every walk of life, both across North Carolina and beyond.

These actions belong to no one division, school, department, or individual. Rather, they depend on the involvement of our community as a whole. All of us are responsible for attracting, challenging, and supporting great students who will contribute to the education and experience of everyone on our campus; and for engaging in earnest and respectful debate and discussion; and for drawing on the strengths and differences of our classmates and colleagues as we develop new and creative solutions to the problems we face as a state and as a society. In these ways, our institutional commitment to diversity and inclusion reinforces our commitment to excellence and propels us forward in all that we do.

Such sustained action to secure the benefits of diversity and inclusion has long been recognized as crucial to our success as a public research university. In 2011, our academic plan, recognizing that a "community that welcomes difference as a vital ingredient of creative change will thrive in manifold ways," reiterated the call to action. The November 2016 Faculty Council resolution – the result of the Diversity Syllabus, a series of purposeful conversations at monthly Council meetings held over a period of two years – called on the University to continue "creating and sustaining a diverse and inclusive environment" and urged ongoing action to prepare "a diverse group of students to work together to meet the broad range of complex challenges facing North

Carolina, the Nation, and the world." More recently, Chancellor Carol L. Folt, speaking at the University's March 2017 Diversity in STEM Conference, called on our community to continue to act to foster diversity and inclusion, reminding her audience that "it increases our educational impact to have a room full of people with different ideas" who "come from different backgrounds" and "walked a different path into that very moment of debate and learning."

The need for sustained and purposeful action to foster diversity and inclusion, and to secure their benefits for our community and especially our students, cannot now be overstated. We live in a time of extraordinary challenge and promise. All around us—across our campus, state, country, and world—are causes and controversies, opportunities and obstacles, and potential and predicaments that require creative thinking, different perspectives, and rigorous and respectful debate. Diversity and inclusion not only enable these practices; they help them lead to innovative answers and shared understanding.

The need for understanding, too, cannot be overstated. The last several years have revealed fundamental challenges in our civic life, in the form of real and urgent concerns about issues involving race, religion, identity, culture, and intellectual diversity. Events and circumstances arising across the country, including some in Chapel Hill, have sparked important discussions about discrimination, bias, and equity. On our own campus, students, faculty, and staff have expressed frustration with the prejudice they have experienced or witnessed on campus and across our state and nation. In the face of these controversies, which are both urgent and painful to many in our community, our success as an institution will depend on our ongoing actions to foster diversity and inclusion and secure their full benefits.

The Benefits of Diversity and Inclusion

The University's commitment to diversity and inclusion reflects our lived and learned experience that they yield lasting and transformational educational benefits—an understanding informed not only by a substantial and growing body of literature but also by feedback from our own students and faculty. These benefits are interrelated; each reinforces the others. Together, they strengthen the educational experience we provide to our students, and they enable our excellence in teaching, learning, creating, and discovering, and in serving all the people of North Carolina.

The 1998 and 2016 statements by Faculty Council, and the 2003 and 2011 academic plans, outlined several specific benefits deriving from diversity and inclusion. The following description is consistent with these statements, elaborating on some of the benefits as a means of providing a clear basis for action and assessment in the future. Just as this description builds upon the previous work of our colleagues, we expect future colleagues to build upon our own work, since our understanding of these benefits is dynamic and developing over time.

<u>Promoting the robust exchange of ideas</u>. Living and learning within an environment of diverse classmates, faculty, and staff encourage the vibrant exchange of ideas, perspectives, and visions, especially when all feel included and encouraged to share their points of view. Students, faculty, and staff need practice in articulating their perspectives to others, just as they need practice in hearing the perspectives of others. This practice of exchanging and engaging with ideas,

including those we do not necessarily share, is essential to higher learning in general. It is also particularly important for the nation's first public university, for whom *lux* and *libertas*—light and liberty—are founding principles.

Broadening and refining understanding. In similar ways, discussion and dialogue with classmates, professors, and colleagues of different beliefs, backgrounds, preferences, cultures, races, ethnicities, and the like—differences of every kind—inform, modify, and expand our own understandings, opinions, and visions. We often leave conversations on campus—whether they take place in classrooms, laboratories, or libraries, or during meals or workouts or walks—seeing things differently from the way we saw them before. Sometimes a problem, or its possible solution, has snapped into sharper focus; sometimes it has come to seem still more complicated, with many more shades of gray than we had previously recognized. Regardless, in being exposed to, and in trying to account for, the diverse perspectives of the other parties to our conversation, we have broadened and refined our own understanding. In a very real sense, this is the essence of the education we strive to provide to each student, and it is consistent with our mission to serve as "a center for research, scholarship, and creativity."

Fostering innovation and problem-solving. The opportunity to study and learn within a diverse and inclusive environment serves as a catalyst for new insights and solutions. By hearing a different idea, merging elements of two separate ideas, or formulating an outside-the-box hypothesis, we shine light on the right answer, move closer to a potential solution, or see an entirely new dimension of a challenge we first thought was less complex. Moreover, diverse and inclusive teams bring different problem-solving approaches to bear on difficult challenges, pushing team members to dig deeper and achieve better results. In all these ways, diversity and inclusion foster innovation, fuel creativity, and drive development and advancement across all disciplines and courses of study—enabling the University to fulfill its mission of "leading change to improve society and to help solve the world's greatest problems."

Preparing engaged and productive citizens and leaders. Our students come from every corner of North Carolina, all fifty states, and countries around the world. To help them prepare to thrive as citizens and leaders, as well as employees and employers, in the increasingly diverse communities and workplaces that await them, the University strives to offer them the opportunity to live, learn, and work within a campus community that is itself diverse. When students collaborate effectively with classmates whose backgrounds, experiences, and perspectives differ from their own, they prepare themselves to serve and work with people of all backgrounds no matter where their personal and professional paths might lead them. The competence and confidence they gain in interacting with diverse constituents, and the legitimacy they earn as a result, position them for engaged and productive lives as citizens and leaders. This is a crucial opportunity that the University must provide to students, given that its mission is in part to teach them "to become the next generation of leaders."

Enhancing appreciation, respect, and empathy. These same learning opportunities, within and beyond the classroom, offer the distinct but related benefit of deepening appreciation for others, awakening students to the ways in which differences of upbringing, culture, identity, and experience combine to contribute to our differences as individuals. Within a community that is

both diverse and inclusive, this appreciation of difference leads to greater respect, both for the various groups with which students identify and for individual students themselves, who like all human beings are irreducible and unique. By allowing us to step regularly into someone else's shoes, diversity and inclusion destroy stereotypes, bridge divisions, and promote empathy—experiences that enable our students to understand not only each other but also "all people in the State," whom our mission obliges us to serve.

These educational benefits of diversity and inclusion are substantial, essential to our mission, and borne out daily through our common life together. But beyond our own conviction and experience, these benefits are well recognized in an expansive and growing body of scholarship, and they are shared, with mission-specific variations, by many other institutions of higher learning. They have also been validated by the Supreme Court of the United States, in its decisions affirming the limited and nuanced consideration of race and ethnicity as one factor among many in student admissions.

Realizing the Benefits of Diversity and Inclusion

The achievement of these crucial benefits requires sustained and purposeful action. From pipeline programs and recruitment initiatives that reach students as they consider whether to apply to the University, to admissions and student-aid practices that allow us to enroll an outstanding and diverse student body, to the many programs that encourage excellence once students arrive, to the ways in which teaching and learning are being reinvented to optimize outcomes—in all that we do, we seek to act out our commitment to diversity and inclusion.

These efforts combine to help us achieve our overarching goals for diversity and inclusion: attracting and enrolling a diverse student body and creating an inclusive environment in which students learn, live, interact, and thrive. And these goals in turn help us secure the educational benefits of diversity: promoting the robust exchange of ideas; broadening and refining understanding; fostering innovation and problem-solving; preparing engaged and productive citizens and leaders; and enhancing appreciation, respect, and empathy.

What follows are examples of some of the many specific programs and initiatives that the University has undertaken in order to achieve these goals and realize these benefits.

Attracting Students from Diverse Backgrounds

Building a community of students with rich and varied backgrounds begins long before students submit their applications. For this reason, the University takes deliberate steps to ensure that talented students from all walks of life are considering the opportunities we offer and preparing themselves to compete for admission.

Our 1st Look program, for example, introduces low-income middle-school students to the idea of college as a pathway to a successful career and a satisfying life. While most college outreach begins in high school, research has shown that students who experience a college atmosphere by middle school are more likely to enroll in postsecondary education and to prepare for college

while in high school. To promote these outcomes, 1st Look welcomes low-income middle-school students to our campus and helps them envision the long-term reward for academic achievement, using UNC-Chapel Hill as a setting to illustrate the experience of college. Although 1st Look takes pains not to promote prematurely any specific university, aiming instead to help students believe that college is both possible and worth pursuing, one important benefit of the program is that it allows students from low-income households to experience our campus first-hand and talk with current University students.

A second outreach effort, Project Uplift, has for more than 40 years welcomed 1,000 rising high school seniors to Chapel Hill each summer, offering them the opportunity to live and learn on our campus. Led by the University Office of Diversity and Inclusion, with support from the Office of Undergraduate Admissions and other campus departments, Project Uplift aims both to enhance the diversity of the University's applicant pool and to help students stay focused on postsecondary enrollment. The program works through a network of partner high schools to invite high-achieving low-income students, as well as African-American, Native-American, Latino/Latina, Asian-American, and rural students, to spend two days on campus experiencing the academic and social climate of the University. Staffed by current students, staff, and faculty, many of whom come from backgrounds similar to those of the students the program serves, Project Uplift helps students forge lasting relationships and gain confidence in their ability to navigate the University and other schools. Through a companion program, Uplift Plus, a smaller number of students receive scholarships for five weeks of summer-school study at the University.

A third outreach program, the Carolina College Advising Corps, places recent University graduates in partner low-income high schools, where they work closely with students to help them search for, enroll in, and succeed at colleges and universities that will serve them well, including, when appropriate, our own University. Housed since its inception in the Office of Undergraduate Admissions, the Carolina Corps has expanded dramatically in its ten-year history: from four advisers, eight partner high schools, and 1,400 graduating seniors in 2007, to 51 advisers, 71 partner high schools, and 14,000 graduating seniors in 2017. Our advisers—trained over the course of the summer by Corps leaders and staff members from the admissions and student-aid offices at the University— work intently on behalf of all students who seek their aid, helping them aim high in the search for schools and scholarships, complete admissions and financial-aid applications, and enroll in colleges and universities where they will thrive. The Carolina Corps continues to yield outstanding results: last year, new partner high schools experienced an average increase in the college-enrollment rates of their graduating seniors of 19 percentage points; longer-term partners, most of which have hosted advisers for four or more years, experienced continuing gains averaging 1.5 percentage points. The program represents a major commitment on the part of the University, and it operates at significant scale, serving approximately 23 percent of all low-income students enrolled in public high schools in North Carolina, as well as 45 percent of all American Indian, 22 percent of all African-American, and 17 percent of all Latino/Latina students. Although the program focuses on helping all its students find appropriate postsecondary enrollments, many of these students find their way to the University, with an estimated 1,000 enrolled as undergraduates during the current academic year. A fourth outreach program, North Carolina Renaissance, reflects yet another collaboration between the University Office of Diversity and Inclusion and the Office of Undergraduate Admissions. The program brings 35-40 rising high-school juniors from rural communities to campus for a four-day enrichment program in which students participate in sessions on leadership, team-building, college admissions, financial aid, and community service.

A fifth program, the Chuck Stone Program for Diversity in Education and Media, sponsored by the School of Media and Journalism, is a week-long workshop for rising high-school seniors who are interested in careers in journalism. Named for Professor Chuck Stone, a champion of diversity in journalism who died in 2014, the program introduces students of varying backgrounds to multiplatform storytelling and writing through classroom study, mentorships, and reporting practices.

A sixth program, the Pre-College Expo and Symposium, led by Carolina Higher Education Opportunity Programs (CHEOP), with support from the Office of Undergraduate Admissions and other departments, provides high-school students of varying backgrounds with opportunities to learn about college preparation and admission in workshops, panels, poster presentations, and a college fair. CHEOP also sponsors a longstanding seventh opportunity, a federally funded Upward Bound Program that annually helps 99 underrepresented, first-generation, and low-income high-school students build the skills and motivation needed to pursue and succeed in college.

An eighth program, sponsored by the American Indian Center, hosts 75 Native American high school students each summer in a three-day crash course that prepares them for the college application process. This program is consistent with the Center's annual forum on the role of higher education in Native nation-building, which focuses on the partnership between the University and the state's tribal nations and ways that they can work together to support students' access to higher education and their development and educational attainment.

In addition to these exemplary programs, the Office of Undergraduate Admissions recruits extensively throughout North Carolina. Last year, for example, the office led or participated in 395 outreach events in 98 of the 100 counties in North Carolina. It also produced and distributed a publication about preparing and searching for colleges, featuring advisers from the Carolina College Advising Corps, to more than 10,000 low-income high-school seniors statewide.

Admitting and Enrolling a Diverse Student Body

The University seeks to admit and enroll entering classes of students that are diverse in every way. We achieve this objective through a carefully designed and implemented process that provides a comprehensive, holistic, and individualized evaluation of every application; by recruiting energetically to yield the students we have admitted; and by creating alternative pathways to enrollment for transfer students and members of the military.

The process of comprehensive, holistic, and individualized review affords each candidate a thorough and thoughtful evaluation, all undertaken to admit and enroll a diverse class of well-qualified students.

- 8. This year the University received nearly 41,000 applications for roughly 4,200 places in the entering first-year class, as well as another 3,000 applications for approximately 800 places in the entering transfer class. The ratio of applications to places necessitates a highly selective admissions process. Eighty-two percent of each entering first-year class comes from within North Carolina, as does between 70 and 75 percent of each entering transfer class.
- 9. The University has designed and implemented its admissions practices, including its careful and limited consideration of race and ethnicity, not only to advance our institutional commitment to securing the educational benefits of diversity and inclusion, but also to comply strictly with legal standards established by the Supreme Court of the United States.
- 10. Every application is read in its entirety by at least one admissions officer, and applicants are evaluated along at least 40 criteria in eight categories. If an applicant chooses to provide information about race or ethnicity, the University may consider this information, but even then only as an additional factor among many others, applied in a non-numerical and non-rote way, and only as a part of the comprehensive, holistic, and individualized review afforded to every candidate. The University in no way establishes or observes quotas, but rather views race and ethnicity in the context of the entire application and against the backdrop of all contributions the student might make to the University community.
- 11. The Faculty Advisory Committee on Undergraduate Admissions broadly oversees admissions practices, and its work includes examining whether race-neutral alternative practices could be adopted that would allow the University, without compromising other objectives, to achieve its goals for diversity and inclusion.
- 12. The University practices need-blind admissions, in that we do not prefer students who can pay the cost of attendance over those who cannot. This approach to admissions, when combined with the University's scholarship and student-aid programs, furthers our ability to enroll a diverse and talented student body. Still, because we are a public university intent on improving lives, and because we value the ways in which high-achieving low-income students help us secure the educational benefits of diversity for everyone in our community, we take pains to evaluate candidates for admission in light of the whole of their socioeconomic circumstances. Rather than enforce rigid cutoffs for grade-point averages or test scores, we evaluate all our candidates individually, comprehensively, and holistically, and in light of the opportunities they enjoy and the challenges they face in their communities, schools, and families. In the words of our Statement on the Evaluation of Candidates for Admission, which the Faculty Advisory Committee on Undergraduate Admissions approved in September 2007, this practice requires "not only that we note the

achievements and potential of each applicant but also that we understand the context within which achievements have been realized and potential forged." This method has borne fruit: between 2009-2010 and 2014-2015, the last year for which federal data are available, the number of Pell Grant recipients at the University rose by 23 percent—the third highest growth rate among the 76 leading colleges and universities that the Equality of Opportunity Project recently labeled "Ivy Plus" or "Elite."

After admissions decisions have been made, the admissions office works purposefully to recruit students who have been offered admission, with particular efforts for students who would contribute to the diversity of the student body and help the University secure the educational benefits of diversity and inclusion for all its students.

- 13. Although approaches to increase yield vary from year to year, they typically involve print and email communications featuring current students; phone calls from current students, faculty members, administrators, and trustees; and special events, both on campus and in communities across North Carolina and the United States, that are designed to connect students with the University community.
- 14. The University has worked intently over the last several years to recruit admitted first-generation-college students. Since 2009, the admissions office has offered an annual series of recruitment events for such students, welcoming students and their families and featuring first-generation administrators and faculty members at the University. Last year these efforts culminated in *firstwelcome.unc.edu*, an effort to connect first-generation students with members of the University community who are themselves first-generation, including dozens of faculty members, administrators, and staff members.
- 15. The admissions office also offers travel grants for admitted low-income students who could not otherwise afford to visit our campus, on the principle that no student should be prevented from making an informed choice about his or her enrollment for want of financial resources.

In addition to these practices for first-year and transfer admission, the Carolina Student Transfer Excellence Program (C-STEP) provides a pathway for talented lowto moderate-income students to transfer to the University from partner community colleges across North Carolina.

- 16. C-STEP guarantees admission to students who earn an associate's degree from a partner college with a cumulative grade-point average of at least 3.2 and whose household incomes are at or below 300 percent of the federal poverty guidelines.
- C-STEP partnerships at three community colleges—Fayetteville Tech, Carteret, and Craven— are particularly focused on veterans and other military-affiliated students.
- C-STEP also provides students with special events and support services before and after they transfer, so that the transition from the home college to the University will be as successful as

possible, and in order to pave the way to graduation.

• More than 625 students have enrolled at the University through C-STEP since its inception in 2006, and the overall graduation rate of C-STEP students is 85 percent.

Removing Financial Barriers to Enrollment

Admission is just one step towards enrollment at the University; other steps are necessary in order to secure diversity, and the benefits of diversity and inclusion, for our student body. One fundamental step involves breaking down financial barriers, so that no admitted student is denied enrollment at the University because of socioeconomic circumstances. For this reason, we commit significant institutional resources to maintain highly equitable aid policies.

- 17. Almost alone among public universities in the United States, the University continues to meet the full demonstrated need of every admitted student who qualifies for federal aid.
- 18. More than 70 percent of aid to undergraduate students comes in the form of grants and scholarships, including \$83 million in need-based grants funded by the University. Another 26 percent of need-based aid comes in the form of loans, and another 2 percent is awarded as work study.
- 19. In response to national research that indicated even small levels of debt deter enrollment for low-income families, the University in 2004 launched the Carolina Covenant, a commitment to debt-free financial aid for our lowest-income students. For qualifying students—currently dependent undergraduates from families at or below 200 percent of the federal poverty level, indexed by family size—the Covenant offers a full-need aid package comprised entirely of scholarships and modest work-study.
- 20. The Carolina Covenant is not just a financial-aid packaging policy; it is also embodies a public promise, giving the University a concise message to assure low-income applicants that they will not have to worry about debt and loan repayment in order to attend and graduate. The Office of Scholarships and Student Aid maintains a separate website dedicated to the Covenant, *carolinacovenant.unc.edu*, and a description of the program is included in all outward-facing aid and admissions materials distributed by the University.
- 21. The Covenant, in concert with other programs and initiatives, has proven effective in contributing to diversity and inclusion on our campus. Beginning with 224 students in the class that entered in 2004, the program now welcomes roughly 700 new students each year. For the past several years, more than 13 percent of all entering first-year students have entered as Covenant Scholars; the share among new transfer students, who also are fully eligible for the program, has been higher still—18 percent in the most recent entering class. In 2015, new first-year Covenant Scholars had a median parental income of \$25,960; 58 percent will be the first generation in their families to graduate from college.

22. All of the programs described above are driven by our commitment to foster both excellence and equity, and in so doing, to secure the educational benefits of diversity and inclusion for all our students.

In addition to these need-based aid programs, the University sponsors the Chancellor's Science Scholars Program. Launched in 2011, this four-year scholarship program fosters diversity among future science and technology leaders by providing first-generation students, underrepresented-minority students, and other students committed to diversity in the sciences an annual merit-based scholarship, a six-week Summer EXCELerator program, intensive academic advising and mentoring, and research opportunities.

In 2016, the University also became a founding member of the American Talent Initiative, a national campaign launched by leading colleges and universities with the collective purpose of increasing enrollments and graduation rates among high-achieving, low and moderate-income students. The goal of the initiative is to enroll and graduate an additional 50,000 such students at the nation's top 270 institutions of higher learning by 2025. Although member institutions set their own goals, focusing on recruitment, enrollment, and retention, they share a commitment to prioritizing need-based financial aid and reducing gaps in achievement among students of different socioeconomic backgrounds.

Learning, Living, and Thriving at the University

Diversity in enrollments alone is insufficient to realize fully the benefits of a diverse and inclusive community. In recognition of this reality, the University invests in a host of programs to provide opportunities—both in and out of the classroom—for students from different backgrounds to interact with one another and enjoy the benefits that diversity and inclusion can provide. We also operate a broad range of programs to ensure that all students have the support and encouragement they need to succeed at the University. We know that students must be welcomed, included, and supported to maximize their potential and their contributions to the campus community. As Stephen Farmer, Vice Provost for Enrollment and Undergraduate Admissions, said in his 2016 University Day address, "All of our students come from somewhere, and all of them travel their own paths to Chapel Hill. But they belong at the University, and the University belongs to them."

<u>Creating a learning environment that leverages diversity and inclusion to spur growth, fuel creativity, and spark intense dialogue</u>. Everyday learning that takes place in lecture halls, seminar rooms, and laboratories across campus and in every area of study—from art history to business to physics to sociology—draws upon the diversity of our students' backgrounds and perspectives to provoke better understanding and more innovative exploration.

• Class discussion is made more enlightening by the inclusion of diverse voices. The University embraces the freedoms of thought and expression as part of striving to provide classroom atmospheres where students feel comfortable bringing their unique perspectives to the table. Such perspectives benefit the entire classroom, allowing each student to gain new

insights and fostering the dismantling of stereotypes.

- Collaboration in study groups, labs, and group projects provides students with the
 opportunity to gain valuable experience working in diverse teams—a skill that is essential for
 their futures in increasingly diverse workforces and communities. These collaborative
 experiences also demonstrate to students the important role that diversity plays in reaching
 creative and innovative solutions to pressing problems.
- Course offerings in many departments and curricula include classes that are focused on the
 topics of diversity and inclusion. These classes range from "Intersectionality: Race, Gender,
 Sexuality and Social Justice," launched in Spring 2017 and co-taught by faculty members in
 English and Comparative Literature, Political Science, and American Studies, to "Diversity
 and Equality in Cities," taught in the Department of City and Regional Planning.
- Faculty-led diversity initiatives also take place all over campus, sparked by professors who
 value and cultivate the educational benefits of diversity in their classrooms, discussion
 groups, and laboratories.
 - Professor Kelly Hogan in the Department of Biology modified her teaching methods
 in large introductory courses to focus on high-value activities instead of lengthy
 lectures, resulting in improved results for all students, including black and firstgeneration-college students. Professor Hogan and others are sharing this innovation in
 teaching through the Center for Faculty Excellence and other University structures,
 spurring the adoption of more interactive and effective teaching methods throughout
 introductory science courses. To support these initiatives, the University is
 reconfiguring classrooms to make them more effective for interactive group learning.
 - Professor Joseph DeSimone of the Department of Chemistry, winner of the 2008
 Lemelson-MIT Prize, has publicly recognized diversity as a "fundamental tenet of
 innovation," recruiting nearly 40 percent of the postdoctoral scholars in his research
 laboratory from underrepresented minority groups. Professor DeSimone has also
 given speeches and lectures on the importance and power of diversity in the
 advancement of science and society, and he has co-written an essay on the subject,
 "Driving Convergence with Human Diversity," published in Science Translational
 Medicine.
 - Faculty also lead and participate in other events and programs to reinforce the
 importance of diversity and inclusion, such as last year's day-long THINKposium
 program, which included nearly 400 faculty and staff members. The University's
 diversity-liaison program engages approximately 60 volunteers within schools,
 institutes, centers, and departments who work to advance efforts to foster diversity
 and inclusion.

<u>Providing opportunities for students to experience the benefits of diversity and inclusion outside the classroom</u>. The University launched Carolina Conversations to create a forum for students,

faculty, and staff to engage in robust and honest discourse on topics related to race, intellectual diversity, religion, identity, and culture. The series, initiated by Vice Chancellor for Student Affairs Winston Crisp, fosters an inclusive environment that promotes productive dialogue across differences of opinion. For example, an event in March 2015 that focused on racial issues and current events was attended by more than 150 students, faculty, and staff, including Chancellor Folt and Vice Chancellor for Workforce Strategy, Equity, and Engagement Felicia Washington. Subsequent events have included student-only conversations, discussions about inclusive classrooms, a dialogue about the First Amendment and hate speech on campus, and a discussion about sexual assault. The series has also extended funding to students who wish to hold their own Carolina Conversations.

The University has hosted town hall meetings to allow students, faculty, and staff the opportunity to voice their opinions on campus issues. In November 2015, for example, a town hall allowed our community to come together in the wake of events across our country to discuss present challenges to our ongoing efforts to enhance inclusion. The town hall generated frank exchanges of views, expressions of urgency, and clear calls to renewed action. Chancellor Folt, who participated in the town hall discussion, responded by appointing a Special Assistant, Dr. Rumay Alexander, to convene a group of senior leaders to develop and implement further efforts to make the University more welcoming and inclusive, including an extension of the Carolina Conversations series into the following year.

The Division of Student Affairs provides programs and services for students that complement their academic pursuits, with the aim of enabling students to become responsible citizens in their communities, a goal furthered by the cultivation of a diverse and inclusive campus. Student Affairs advances inclusion through initiatives across its departments, including:

- Carolina Housing and Residential Education, which provides housing for more than 10,000 students and works to foster an inclusive and accessible residential environment through various programs;
- The Campus Y, a 150-year-old public-service student organization, jointly led by students and staff, that houses more than 30 student-initiated social-justice committees and supports roughly 2,000 student volunteers annually, with a particular focus on community inclusion, education and youth development, public health, global issues, and advocacy; and
- Carolina Union, which offers cultural, social, educational, and entertainment programs to the entire University, and which serves as a hub for student organizations such as Ahmadiyya Muslim Student Association, Asian Students Association, LGBTQ Center, and others.

The Minority Student Recruitment Committee, the student arm of the University Office of Diversity and Inclusion, is made up of students who coordinate academic, cultural, and social programming with the goal of cultivating an inclusive campus. The committee partners with other student organizations, including the Black Student Movement, the Carolina Indian Circle, and the Carolina Hispanic Association, to create workshops and seminars and to support student organizations on campus.

Ensuring all students have the support necessary to thrive at the University. As noted above, the newly reconstituted University Office of Diversity and Inclusion—housed within the Division of Workforce Strategy, Equity, and Engagement, but integrally connected to the Office of the Executive Vice Chancellor and Provost, the Division of Student Affairs, and other key elements of the University—is charged with positioning students to reach their full potential. In keeping with this mission, the office will continue to operate a range of programs to promote and maintain a diverse and inclusive environment on campus, including Achieving Carolina Excellence, a pre-orientation program that assists new undergraduate students from underrepresented populations in their transition to the University through sessions on academics, cultural activities, and service-learning projects, and Carolina Latinx Collaborative, which raises awareness of Latinx issues and cultures, in addition to supporting Latinx students through various services, including a mentoring program and bilingual support.

Thrive@Carolina is a University-wide initiative to strengthen success for all students, led by a working group convened by Provost James W. Dean, Jr., and drawing on the resources of offices and departments across campus. The initiative seeks to build support for all students, with the specific goals of helping the University achieve the highest overall graduation rates among public universities in the Association of American Universities and eliminating gaps in graduation rates between low-income, first-generation-college, and underrepresented students and the student body at large. As a result of this initiative, the University has funded and filled positions that support first-generation-college students, staff a tutoring hub for students enrolled in STEM courses, and make transition courses more widely available to all students. The initiative has also provided grants to faculty and staff members for collaborative projects that strengthen student success.

Carolina Firsts is an initiative in the College of Arts and Sciences, with support from schools and departments across the University, to encourage and support the nearly 20 percent of University undergraduates who will be the first generation in their families to graduate with four-year degrees. The program helps students make the transition to University life by collaborating with the Office of Undergraduate Admissions in the recruitment of admitted students, connecting enrolling students with faculty and staff advocates, hosting events during orientation and at graduation, and providing awards and recognition. The program also includes a student organization of the same name that offers students a supportive network of peers.

Men of Color Engagement is another initiative in the College of Arts and Sciences that works to foster excellence among male students of color at the University. The program helps students secure research opportunities, facilitates introduction to graduate and professional programs, and provides a forum for discussion of race-related issues. One initiative of the program, Carolina MALES, hosts monthly networking gatherings with alumni and campus professionals, connects students with mentors, and organizes an annual summer immersion trip to a major city. Each of these initiatives complements the University's ongoing efforts to enhance the academic success of minority male students, as reflected in the *Provost's Minority Male Workgroup:* Recommendation Report.

CHEOP offers the NC Health Careers Access Program, which supports underrepresented and low-income undergraduate students who aspire to enter the health professions through an intensive, nine-week summer Science Enrichment Preparation Program, a health careers club, and information about careers in the health professions. The office also sponsors the Ronald E. McNair Scholars Program, a federally-funded TRiO program that provides programming and support for undergraduates who are either first-generation-college students from low-income backgrounds or members of an underrepresented group and who plan to pursue doctoral studies. Thirteen rising juniors are chosen each year to participate in the two-year program, which includes an intensive summer research experience, counseling and advising, faculty mentorship, graduate school tours, and other activities.

In addition to these programs and initiatives, several University centers sponsor programs that provide essential encouragement to, and raise awareness of, students who are diverse along many different dimensions; these centers include, for example, the LGBTQ Center, the American Indian Center, and the Sonya Haynes Stone Center for Black Culture and History. The University also provides dedicated support to student veterans through the Student Veterans Assistance Coordinator in the Office of the Dean of Students and through a Veterans Resources Team that includes specific points of contact in various departments, including academic advising, student wellness, accessibility resources and services, campus recreation, housing and residential education, and more.

Continuous Evaluation of Our Progress

While substantial work remains to be done, the undergraduate student body today is more diverse than ever before. The University enrolls students from all 100 counties in North Carolina, all 50 states across the nation, and more than 100 countries around the globe. The undergraduate student body is 58 percent female and identifies as 12 percent Asian or Asian American, 8 percent black or African-American, 8 percent Hispanic of any race, 4 percent two or more races, and 0.5 percent American Indian or Alaska Native. The University is also one of the most economically diverse institutions among elite universities in the United States, with nearly 20 percent of all undergraduate students being first-generation-college students and more than 40 percent receiving need-based financial aid. Today the University has the most veterans on campus since World War II, and 7 percent of the student body identifies as military-affiliated. Taken together, these students bring to our campus varying perspectives, experiences, beliefs, and goals, and they come from households headed by immigrants, small-business owners, physicians, unskilled laborers, pastors, community activists, police officers, lawyers, homemakers, and teachers.

The range and diversity of interest in our student body, and the range and depth of talent, are substantial. Our students come to us aspiring to lives in public service, business, community development, health affairs, military service, research, teaching, the arts, and athletics. Last year alone, 3,000 undergraduate students produced original research in 140 courses in the humanities, natural sciences, and social sciences. Others studied around the world, with nearly a third overall participating in study abroad during their careers at the University. Our students also engaged deeply with communities across North Carolina, the nation, and the world, recording more than

500,000 hours of community service last year alone. By virtue of these and other educational experiences, our students are graduating fully equipped to make differences in the varying paths they will travel within and beyond North Carolina.

While these results are remarkable, our work is far from complete. Although our commitment to diversity and inclusion will remain unwavering, we recognize that our efforts to achieve these ends must be constantly reevaluated and improved, especially in the face of present challenges. Progress is an iterative process: it requires persistent effort and evaluation. Likewise, assessing the effectiveness of our efforts to secure the benefits of diversity and inclusion requires the active gathering of information from across our campus regarding how diverse the University is; how included our students, faculty, and staff are and feel; and how fully our students are experiencing the important benefits of diversity and inclusion both within and outside of the classroom. Collecting quantitative data is just one aspect of this assessment; a full picture of diversity and inclusion at the University will also require that we provide students with opportunities to tell us their stories and experiences, and for the University to then act upon this feedback.

Towards this end, the University will continue tracking the diversity of our student body, using measures such as the Carolina Metrics database and other efforts from the Office of Institutional Research and Assessment. But recognizing that diversity and inclusion cannot be captured in quantitative data alone, we also commit to hearing our students' experiences of diversity and inclusion through means such as senior surveys, Carolina Conversations, climate assessments, leadership surveys, and other instruments, including revised course evaluations that will invite feedback on matters of diversity and inclusion. Our various schools, divisions, departments, and groups across campus will continue their own efforts to assess, and they will communicate their results through reports and conversations with senior leaders.

We will also expand the ways in which we gather information about diversity and inclusion. Collecting broader data through additional surveys and climate studies, creating more opportunities for students to express themselves to campus leadership, and developing more refined assessment criteria for our diversity and inclusion programs are among the efforts in which we will invest. Indeed, this need for expanded assessment is one of the reasons we have chosen to strengthen and refocus the University Office for Diversity and Inclusion.

Our work will not end with the launch of this office. We will search for new ways to measure and assess the progress and impact of diversity and inclusion at the University, and this search will require that we identify other areas in which we will need to collect information, as well as other opportunities for careful development and considered judgment of the many ways in which our students experience the educational benefits we must offer. Substantial input from students will be essential to these efforts, as will the broad engagement of faculty and staff.

Moving Forward, Achieving More, Always Improving

Now is the time for bold and renewed commitment. Diversity and inclusion are now as important as ever, and their benefits, as our experience continues to show, are real, transformative, and

lasting. Our mission requires that we do all we can to provide these benefits to every student who chooses to enroll at the University.

Steady progress, while sometimes uneven, marks the success of all great institutions. This progress will never come easy or fast; history proves that reality, as do the challenges of recent years. Advancement along any dimension may be difficult, tedious, and exhausting, and often accompanied by passionate debate, frustrating confusion, and substantial trial and error. These dynamics, however messy they might feel in action, are the ingredients of long-term progress, especially when driven by commitment and the strength of resolve. Experience has shown that, in the pursuit of progress, a new idea, hypothesis, or insight emerges from diverse perspectives and robust discussion.

To further our mission, and especially our service to all the people of North Carolina, we will continue to invest substantially in ensuring broad access to the University for talented and hardworking students from diverse backgrounds. We will foster this access by maintaining and improving our outreach and recruitment efforts, our holistic admissions policies and practices, and our broad program of need-based financial aid. We will also continue to build and sustain an inclusive campus community through opportunities for robust dialogue and through programs that encourage excellence for all students.

In all instances, we will ensure strict compliance with our obligations under the law. Advised by the Office of University Counsel, and benefiting from the oversight of the Advisory Committee on Undergraduate Admissions and the advice of its Committee on Race-Neutral Strategies, we will continue to confirm that our admission practices adhere to the legal standards defined by the Supreme Court. We will also evaluate continuously whether any alternatives to present practices would allow us to achieve our diversity objectives, along with other mission-critical objectives, in new ways.

Through the creation of the University Office for Diversity and Inclusion, and in the naming of a new Associate Vice Chancellor for Diversity and Inclusion to lead this office, we will enhance the oversight, coordination, and assessment of the many efforts to foster diversity and inclusion on our campus. All of this work will inform, and align fully with, the University's new strategic framework, which is currently in development.

In all of these ways, the University will continue to focus on diversity and inclusion as crucial components of the excellence that our mission requires us to pursue and to achieve. We must continue to strive to ensure that the University is a place where individuals from every background are welcomed, respected, and included. Our students expect no less of us, and our mission demands no less from us.

Appendix E The Report of the Working Group on Race-Neutral Alternatives: Exploring Race-Neutral Alternatives in Undergraduate Admissions

Exploring Race-Neutral Alternatives in Undergraduate Admissions The University of North Carolina at Chapel Hill Office of Undergraduate Admissions

Introduction

In November 2013, the University of North Carolina at Chapel Hill convened a campus-wide working group to explore alternatives to race-conscious practices in admission. The members of the working group are named in Appendix A. The charge of the group was to identify reasonable alternatives to race-conscious practices in admissions; evaluate each alternative to determine whether it yields an entering class with equal or greater diversity and academic quality; and to present its findings to the Advisory Committee on Undergraduate Admissions.

This report summarizes the work of the committee. Because our efforts were informed by larger legal, institutional, and research contexts, we framed our findings within a brief discussion of the legal history of affirmative action in the United States, our institutional mission especially as it relates to diversity and academic quality, a description of our current admissions policies and practices, and our knowledge of other research being conducted on race-neutral alternatives. Each of these contexts influenced the race-neutral alternatives we chose to pursue, as well as the criteria used to evaluate them.

Legal History of Affirmative Action

The U.S. Supreme Court first ruled on the use of race in university admissions in 1978 in Regents of the University of California v. Bakke. In a split vote, the Court declared set-aside programs unconstitutional, but reserved the right of universities to use a student's race or ethnicity as one factor among many when making admissions decisions. The use of race, Justice Powell wrote, must be "precisely tailored to serve a compelling governmental interest" (Bakke, 438 U.S., at 299). Using this standard, Justice Powell approved the use of race to further one interest and one interest only – the attainment of a diverse student body – arguing that the "nation's future depends upon leaders trained through wide exposure to the ideas and mores of students as diverse as this Nation of many peoples" (Id., at 313). Importantly, Justice Powell defined diversity broadly: "the diversity that furthers a compelling state interest encompasses a far broader array of qualifications and characteristics of which racial or ethnic origin is but a single though important element" (Id., at 315).

The Court revisited affirmative action in higher education twenty-five years later in 2003, in *Gratz v. Bollinger* and *Grutter v. Bollinger*. Writing the majority opinion in both cases, Justice O'Connor affirmed student body diversity as a compelling government interest, explaining that the "educational judgment that...diversity is essential to [the institution's] educational mission is one to which we defer" (*Grutter*, 539 U.S., 16). Even when the use of race is permitted to further a compelling state interest, however, the government must show that the means to achieve that end are narrowly tailored. The Court concluded that the individualized, holistic review used by the University of Michigan Law School met the narrow tailoring

requirement, while the awarding of bonus points to students of particular races/ethnicities – a system used in undergraduate admissions at The University of Michigan – did not. The Court advised:

When using race as a 'plus' factor in university admissions, a university's admissions program must remain flexible enough to ensure that each applicant is evaluated as an individual and not in a way that makes an applicant's race or ethnicity the defining feature of his or her application. The importance of this individualized consideration in the context of a race-conscious admissions program is paramount (*Grutter*, 539 U.S., 24-25).

The Court also instructed universities to make "serious, good faith consideration of workable race-neutral alternatives," though without requiring "exhaustion of every conceivable race-neutral alternative," nor consideration of alternatives that would jeopardize other aspects of an institution's mission (*Id.*, 27). In *Grutter v. Bollinger*, for example, the Court agreed with the Law School that race-neutral alternatives like lottery systems and the lowering of admissions criteria would jeopardize the school's mission. "Because a lottery would make... nuanced judgment impossible, it would effectively sacrifice...every other kind diversity" (*Id.*, 28). And because lowering admissions standards would sacrifice academic quality, the Law School would become a different kind of institution altogether.

Although *Grutter v. Bollinger* upheld the use of race in admissions, the Court nonetheless stipulated that race-conscious admissions programs must have a logical end point. Justice O'Connor concluded by prophesying "that 25 years from now, the use of racial preferences will no longer be necessary to further the interest approved today" (*Id.*, 31). Until that time, however, the Court advised universities to conduct periodic reviews to determine if race-conscious policies are still necessary to achieve student body diversity, and to pay attention to the results of race-neutral alternatives already implemented in states like California, Texas and Washington where racial preferences in admissions are prohibited by state law. "Universities in other States can and should draw on the most promising aspects of these race-neutral alternatives as they develop" (*Id.*, 30).

Most recently, in *Fisher v. Texas*, the Supreme Court remanded the case back to the Fifth Circuit court for failing to hold the university to the demanding burden of strict scrutiny, which requires the university to prove that the use of race serves a compelling government interest, and that it is narrowly tailored to achieve that end. The courts may grant deference to universities' judgment that diversity is essential to its academic mission, but with respect to narrow tailoring, the university receives no deference. Justice Kennedy writes, "It is at all times the University's obligation to demonstrate, and the Judiciary's obligation to determine, that...it is 'necessary' for the university to use race to achieve the educational benefits of diversity. The reviewing court must ultimately be satisfied that no workable race-neutral alternatives" would achieve the same ends (*Fisher*, 570 U.S., 2).

Existing Research on Race-Neutral Alternatives

The Courts instructed universities across the nation to pay attention to the results of "natural experiments" being conducted in states like California, Texas, and Washington, all three of which banned affirmative action in the late 1990s. Although the impact of eliminating affirmative action varies across state – given the demographics of a particular state, for example, or the number of public institutions it houses – the research conducted on outcomes resulting from actual policy changes has obvious advantages over simulations and modeling (e.g. eliminating the need to make assumptions about student behavior, shedding light on unanticipated consequences, documenting change over time). Before investigating our own alternatives, the working group familiarized itself with alternatives being implemented in other states and existing research on current practices. The research falls under three broad (albeit somewhat arbitrary) categories: impact on minority representation, impact on applicant behavior, and impact on academic quality.

(1) Impact on Minority Representation

In an article titled "Affirmative Action and its Alternatives in Public Universities: What Do We Know?" Long (2007) investigates the impact of affirmative action bans in Texas, California, Washington, and Florida. Texas, California, and Florida all implemented some version of a top x% plan; Washington focused on increasing outreach and recruitment. Long (2007) concludes that "despite the many alternative strategies implemented at public universities in these states, schools have not been able to maintain minority enrollments absent affirmative action...they have discovered no true substitutes" (315). Furthermore, he argues, any rebounds in minority enrollment have resulted from the growing minority population in these states; in other words, the share of minorities in the population of students at select public universities has declined relative to their share in the population of high school graduates. At UC Berkeley, for example, minority student underrepresentation in the student body was minus 5 to minus 10 percent relative to their representation among high school graduates prior to the ban on affirmative action in 1997. After 1997, underrepresentation increased to minus 20 percentage points below, and has changed very little in the last seven years. Similar patterns were found across states with the exception of Florida, where the ban on affirmative action has had little impact on minority representation. Long (2007) attributes Florida's success to efforts made by universities in the 1990s to increase applications from underrepresented minorities.

Research suggests that the impact of bans on minority representation plays out differently at different kinds of institutions. In examining the pool of students admitted to *all* public institutions in Texas between 1998 and 2004, Chapa and Horn (2007) found that the share of White students dropped from 66 to 58%, while Hispanic representation increased and African-American representation remained constant. When Long and Tienda (2008) investigated enrollment at the public flagships, however, a different picture emerged. At UT-Austin, for example, the share of Hispanic and African American students fell from 20% to 17.7%. Similarly, Hinrichs (2010) modeled the impact of a nation-wide ban on affirmative action, and concluded that public universities ranked in the top 50 according to US News and World Report would experience the greatest declines in minority enrollment and subsequent increases in white enrollment. He concludes that "affirmative action bans do not affect who goes to college, but they have some effect on where people go to college" (712). Howell (2010) also modeled a

disproportionate impact, estimate a 2% decline in African American and Hispanic representation at most four-year colleges as a result of a nation-wide ban, but as much as a 10% drop at the most selected institutions.

Koretz, et. al. (2002) used data from the California state system to model the impact of various admissions policies on the diversity of student bodies at selective, moderately selective, and less selective universities within the state. Using only HSGPA and SAT data (from 1995-1998), and categorizing matriculation as a series of steps – taking the SAT, establishing UC system eligibility, applying to specific UC system campus, and gaining admission to a UC system campus – Koretz, et. al (2002) were able to model the potential impact of each step on the diversity of the student body in the absence of affirmative action. At highly selective universities like UCLA and Berkeley, for example, diversity was impacted by each of the following: underrepresentation of Hispanic students in the SAT-test taking population; the disproportionate number of Black students impacted by UC eligibility criteria; and a race-neutral admissions policy that further reduced Black and Hispanic representation.

Koretz et. al. (2002) also modeled the impact of various X% plans on the diversity and academic qualifications of students admitted to the UC system. The four models considered were: 1) admitting the top 12.5% of all students statewide (the baseline condition); 2) admitting the top 12.5% of students at each school; 3) admitting the top 6% at each school, and the top 6.5% statewide; and 4) admitting the top 4% at each school, and the top 8.5% statewide. The third and fourth models, they concluded, had little impact on the average SAT score or the proportion of underrepresented students in the admitted pool. Admitting the top 12.5% at each school had the largest positive impact on diversity – nearly doubling the representation of both Black and Hispanic students – but also the largest negative impact on academic qualifications, with an average drop in SAT of over 100 points for underrepresented minorities. Admitting the top 12.5% at each school also increased representation of first-generation college students, students from urban schools, and bi-lingual students. Finally, the authors also modeled the impact of admissions policies that preference demographic factors other than race, such as school type, mother's education, income, etc. Ultimately, "none of the alternative admission models analyzed could replicate the composition of the student population that was in place before the termination of affirmative action in California" (p. 27).

Epenshade and Chung (2005) examined how preferences for different types of students – athletes, legacies, underrepresented minorities – impacted the composition of admitted students at three private, elite, research institutions. According to their model, eliminating affirmative action would reduce acceptance rates for African Americans from 33.7% to 12.2%, while the proportion of African American students in the admitted group would drop from 9.0 to 3.3%. The change in policy would impact Hispanic students similarly; their acceptance rate would be cut in half (from 26.8% to 12.9%), while their representation in the admitted pool would fall from 7.9% to 3.8%. The authors also looked at who would benefit most from the elimination of affirmative action, and concluded that 4 out of 5 spaces not taken by African American and Hispanic students would be filled by Asian students. By contrast, Epenshade and Chung (2005) found that athlete and legacy preferences have minimal impact on the diversity of the admitted pool: "preferences for athletes and legacies do little to displace minority applicants largely

because athletes and legacies make up a small share of all applicants to highly selective universities" (p. 304).

Although class-rank plans are by far the most widely used race-neutral alternative, some institutions have combined class-rank plans with consideration of other factors like geography. As Rendon, Novack, and Dowell (2005) report, The University of California-Long Beach was recently faced with competing objectives - to reduce enrollment while maintaining and/or increasing diversity using race-neutral admissions policies. In fall 2002, the university adopted a new admissions policy favoring students in the local service area who also met the statewide eligibility index for moderately selective state schools. The eligibility criteria were increased for students who lived farther away from the local service area. Because even the lesser stringent criteria were known to disproportionately impact African American and Latino students, university officials were not surprised when the diversity of the enrolling class was compromised. The school was able to shrink enrollment by 32.8%, but African American enrollment declined by 52.3%, while Latino representation fell 39.7%. The following year, the university altered its geographic boundaries, extending the local service area to include several more schools, thereby increasing the number of students eligible for admission under the less stringent standards. Because the new service areas were ethnically diverse, the university was able to meet its diversity goals. The authors noted that although geographic preference models worked in Southern California, they would not necessarily work for universities in less diverse parts of the country.

Although UC-Long Beach was able to use geographic preferences to create a diverse student body, socioeconomic preferences have received the most attention in the research literature as a viable race-neutral alternative. Kahlenberg (2003), writing on behalf of The Century Foundation and using data from 146 of the nation's top colleges, concluded that economic affirmative action provides the best way to meet a number of different goals. Basing many of his conclusions on the work of Carnevale and Rose (2003), Kahlenberg (2003) argues that economic affirmative action is a better approximation of merit (e.g. the notion of academic achievement taken in context of obstacles overcome) than race-based affirmative action; achieves nearly as much racial diversity yet much greater economic diversity (e.g. students in the bottom half economically would comprise 38% of students at elite colleges, as opposed to 10% under current models); and results in the same graduation rates. Kahlenberg (2003) concludes that economic affirmative action, unlike racial affirmative action and percentage plans, is the only model that addresses "the fundamental root source of inequality: the division between the haves and the have nots" (p. 4).

More specifically, Carnevale and Rose's (2003) study examines the impact of five different types of admissions models – a race-neutral model based on test scores and grades; a lottery system; class-rank preferences without a minimum test score; class-rank preferences with a minimum test score; and a model based on economic preferences – and places each in the context of the population currently attending elite institutions (of which the least-represented group, they argue, are low SES students). Using data from the top 146 colleges and universities, the authors find that a race-neutral model based on academic merit would reduce representation of underrepresented minorities (the only model of the five to do so), a class-rank model without a

minimum SAT score would increase racial and economic diversity, but puts some students at risk academically, a class-rank model with a minimum SAT would have a negative impact on racial and economic diversity but a positive impact on graduation rates, while a model based on economic status would compromise racial diversity only slight, improve economic diversity substantially, and maintain student performance. Carnevale and Rose's (2003) conclusion, however, differs slightly from Kahlenberg's (2003). Economic affirmative action, they recognize, is not a substitute for race-based affirmative action. "Income-based policies are not an effective substitute for conscious racial and ethnic enrollment targets, unless low-income African American and Hispanics can be chosen disproportionately from the qualified pool of low socioeconomic status students..." (p. 153).

St. John, Simmons, and Musoba (2002) build upon the publicly accepted notion of merit as academic achievement in the context of obstacles overcome. Merit, they argue, "is not simply where you wind up, but what you did with what you were given" (p. 37). Using this as their theoretical foundation, they built a merit index that accounts for the quality of school attended by each individual student. They calculate a simple index by subtracting the average SAT score of an applicant's high school from the applicant's own score, and a more complex index by assigning higher weights to schools with disproportionately poor performance. According to their analysis, using data from two universities, the simple merit index increased diversity in the applicant pool, while the more complex index predicted persistence as well as the SAT. They conclude that although "the merit-aware approach can provide a fair and just way to screen admissions applicants, it is not a substitute for affirmative action" (p. 44)

(2) Impact on Applicant Behavior

Harris and Tienda (2009) investigated an often overlooked component of race-neutral admission policies -their impact on the application rates of minority and non-minority high school graduates. "Despite their centrality in shaping the composition of entering classes, with few exceptions application rates have been relatively ignored as a focus of inquiry. Partly this reflects data constraints and partly the fact that litigation targets criteria used in institutional admissions decisions, not individual decision to apply...or enroll" (p. 2). Building on the findings of Koffman and Tienda (2008), who reported that the top 10% law did little to raise the application rates at public flagships of students from poor high schools, Harris and Tienda (2009) investigated application rates by ethnicity. Using ten years' worth of data (1993-2003) from public high schools in Texas, the authors found that Hispanic and black application rates to the Texas flagship universities fell after affirmative action was banned, and that there disadvantage has grown over time. "This result," they conclude, "has profound policy implications that transcend admission regimes because they redirect attention away from the seemingly irresolvable differences about race or class rank preferences to encouraging greater numbers of qualified applications to apply" (p. 20). They identify the cultivation of a college-going culture at under-resourced high schools, coupled with financial aid, as a short-term, low cost strategy for improving diversity.

Five years earlier, Long (2004) found a similar impact on the application behavior of underrepresented minorities in both Texas and California. The changes, he discovered, widened

an already existing gap between the number of SAT score reports sent to in-state public colleges, particularly in California, by minority and non-minority students. In addition, Long (2004) discovered that minority students began sending SAT scores to lower quality colleges post-affirmative action, while White and Asian American students began doing the opposite. This indirect effect of the elimination of race-based preferences, he argued, could be more detrimental than the direct impact caused by the policy change itself. Like Harris and Tienda (2009), Long (2004) argues that "college administrators and policymakers should focus their attention on efforts to boost minority applications. Such a strategy could ultimately be the most effective method to maintain minority enrollments after the elimination of affirmative action" (p. 341).

Similarly, Niu, Tienda, and Cortes (2006) document disparate educational aspirations of minority and non-minority students in Texas, within the context of the Top 10 percent law. Using data from 2002, they found that high school seniors from low-income schools, compared to their affluent counterparts, were less likely to choose selective institutions as their first choice school. In addition, Black and Hispanic students were less likely than white students to choose selective institutions, as either their first preference when planning for college, or when choosing to enroll. Within top decile students, however, minority group status and high school type did not impact enrollment; students from affluent and low-income schools, for example, were equally as likely to choose selective institutions. What these results concealed, however, were differences in application rates of students by high school type; even top-decile students from low-income schools and/or underrepresented minority groups were much less likely to actually seek admission than other top-decile students.

Like underrepresented minority students in Texas and California, underrepresented minority students in Washington reacted similarly to affirmative action bans in their state. Brown and Hirschman (2006) discovered that representation of minority students at the flagship university – University of Washington – fell from 8.2% of the first-year class to 5.7% of the first-year class following the passage of I-200 (the law banning affirmative action). While admission rates declined the first year of the ban – from 84 to 70% for African American students the authors concluded that the drop in applications explained the decline in minority student representation more than the change in admission rates due to the ban. By 2003, the application rates of minority students in Washington had largely rebounded to pre I-200 levels; nevertheless, the gap in application rates between minority and non-minority students persists, and the authors concluded that even a modest gain in the proportion of minority applicants who apply would have significant impact on the composition of the first-year class. They conclude that affirmative action policies signal an "institutional welcoming environment" that "serves as a counterweight to the normal reluctance of prospective students to apply to institutions that may be perceived as intimidating" (p. 106).

Others, however, have found little change in the application behavior of underrepresented minority students in the face of affirmative action bans. Card and Kreuger (2004) used SAT-sending patterns as a proxy for applying to an institution, and found little difference in the rates of application for Hispanic and Black students pre and post affirmative action in California or Texas. Their sample, however, was limited to highly-qualified underrepresented minority students. "A particular concern," they write, "is that highly qualified minorities – who were not

directly affected by the policy change – would be dissuaded from applying to elite public schools, either because of the decline in campus diversity or because of uncertainty about their admission prospects" (abstract). They found no evidence to support the concern.

More conflicting evidence comes from Long, Saenz, and Tienda (2009), who like Koffman and Tienda (2008), investigated the application behavior of students in Texas by high school. Koffman and Tienda (2008) concluded that students from affluent high schools are more likely to seek admission to public flagships compared to graduates of schools serving students of low to moderate socioeconomic means, even after the implementation of the Top 10 percent law. In the end, they found that the admission guarantee did little to raise flagship application rates from poor high schools. Long, Saenz, and Tienda (2009), however, contend that the applicant pool at Texas flagships has become more geographically diverse in the post-Hopwood era; a smaller share of students come from traditional feeder schools, while applicants from students attending rural and high-poverty schools has increased. "After 1998, the overrepresentation of students from low-poverty high schools began a downward trend, as the share of UT enrollment from the highest poverty high schools inched upward. Most impressive is the growing representation of students from schools where 40 to 60% of students receive free or reduced lunches" (p. 15). Long, Saenz, and Tienda (2009) believe the transparency of new admissions policies - possibly even more than the "institutional welcoming environment" attributed to affirmative action – encourages traditionally underrepresented students to apply.

(3) Impact on Student Quality/Academic Performance

Chan and Eyster (2003) modeled the impact of race-neutral alternatives on student quality, recognizing that most universities value both academic preparedness as well as diversity. In both theory and practice, they argue, the elimination of affirmative action leads universities to adopt admissions policies that partially ignore student qualifications, resulting in a less academically able student body. "For any admissions rule that partially ignores qualifications, there exists an affirmative action rule that yields the same diversity and strictly higher student quality. In fact, affirmative action maximizes total student quality for any level of diversity" (p. 859). Furthermore, the authors argued that using socioeconomic status as a proxy for race would reduce quality and diversity; since class is negatively correlated with academic performance across all ethnic groups, a policy favoring all low-income students would reduce quality. Because very few academically qualified low-income students are minorities, a policy admitting only qualified low-income students would compromise diversity.

Furstenburg (2009) examined the academic performance of students admitted as a result of class-rank policies, who would not have been competitive otherwise. Whereas little evidence has been found to support the mismatch hypothesis – the notion that students admitted under affirmative action are academically unqualified – Furstenburg (2009) demonstrated that students admitted under race-neutral policies in Texas had lower first and sixth-semester GPAs, and lower probability of graduation. The effect was strongest for White and Hispanic students. He concluded, "To the extent that administrators at selective institutions want to maintain their academic standards, policy makers should reconsider policies such as Top Ten Percent Law. Admissions policies without guarantees and admissions decisions based on individual

evaluations of applicant's qualifications are likely to avoid this problem" (p. 17). [Note: Furstenburg's (2009) findings seem to contradict those of Chapa and Horn (2007), though he focused on a subpopulation of students – those not likely to be admitted otherwise – while Chapa and Horn (2007) included all students admitted under the Top 10 percent plan].

Fletcher and Tienda (2009) approach the question of academic performance and affirmative action from a different angle, investigating the relationship between the quality of the high school a student attends and his/her college success. The persistence of an achievement gap between minority and non-minority students has puzzled scholars for quite some time; "despite voluminous social science literatures that document and evaluate the dimensions and evolution of academic achievement gaps," the authors write, "they remain poorly understood" (p. 1). In this study, Fletcher and Tienda (2009) replicate previous research, reducing – but not eliminating -the achievement gap between minority and non-minority students by controlling for test scores and class rank. When they take into account differences across high schools, however, gaps between black-white and Hispanic-white students in several college outcomes are eliminated or reversed, regardless of institutional selectivity. The authors claim their study illustrates "how high school quality foments race and ethnic inequality in college performance" (p. 1).

The University's Philosophy, Policies, and Guiding Principles Regarding Diversity, Academic Excellence, and Undergraduate Admissions.

In a 2008 policy paper prepared by the College Board's Access and Diversity Collaborative, the Board advises universities seeking race-neutral alternatives to ask itself a series of questions, the first and most important of which is whether or not the institution's diversity-related goals are clearly defined and understood. "If goals are not clear, then the viability of race-neutral policies can't be evaluated with any precision. The determination of the viability of a policy designed to achieve some goal is dependent on the goal itself' (Coleman, Palmer, & Winnick 2008). Indeed, all institutional goals – not just goals related to diversity – much be clearly defined for the purpose of this project, since any race-neutral alternative is evaluated not only on the merits of its ability to create a diverse class, but also the degree to which it supports and/or conflicts with other institutional goals. The Supreme Court does not expect universities to pick and choose among its priorities. For this reason, the working group outlined the university's longstanding commitment to diversity, as defined and documented in various policy statements, with special attention to the ways in which this commitment informs current practices in undergraduate admissions.

(1) The Mission of the University.

The admissions policies and practices of The University of North Carolina at Chapel Hill derive from and are aligned with the mission of the University (Appendix C). Our mission statement confirms that Carolina exists "to serve all the people of the State, and indeed the nation, as a center for scholarship and creative endeavor." The University's mission statement explicitly recognizes Carolina's long history of preparing undergraduate students for leadership roles both within North Carolina and nationwide. We are charged to "provide high-quality

undergraduate instruction to students within a community engaged in original inquiry and creative expression, while committed to intellectual freedom, to personal integrity and justice, and to those values that foster enlightened leadership for the state and nation."

(2) The Board of Trustees' Policy on Undergraduate Admissions.

The Board of Trustees' policy on admissions establishes a framework of competitive admissions and mandates that candidates by selected largely on the basis of the University's "special responsibility to residents of North Carolina" and its "judgment of the applicant's relative qualifications for satisfactory performance" in the program to which the applicant seeks admission. At the same time, this policy explicitly states that these two broad selection criteria

...shall not prevent the admission of selected applicants (a) who give evidence of possessing special talents for University programs requiring such special talents, (b) whose admission is designed to help achieve variety within the total number of students admitted and enrolled, or (c) who seek educational programs not readily available at other institutions.

The policy goes on to frame the interest in variety as an affirmation of the University's "commitment to achieve excellence, to provide for the leadership of the educational, governmental, scientific, business, humanistic, artistic, and professional institutions of the state and nation, and to enrich the livers of all the people of North Carolina."

For admission to the first-year or freshman class, the policy specifies several criteria—including "satisfactory evidence of scholastic promise" gleaned from the applicant's academic record, recommendations, test scores, application, and predicted first-year performance—but delegates to the Faculty Advisory Committee on Undergraduate Admission the authority to approve procedures to assess this evidence.

(3) The Academic Plan.

The University's Academic Plan, adopted in 2003 after more than a year of campus-wide deliberation, elaborates on our mission by articulating six overriding academic priorities, all grounded in the critical principle that the University must provide "the strongest possible academic experience for undergraduate, graduate and professional students." These priorities differ in focus but reflect shared judgments about the nature of Carolina academics: that diversity, broadly construed, is fundamental to student success; that different students may contribute to this success in different ways; and that Carolina, to fulfill its mission, must educate leaders who are prepared to engage deeply with and function effectively within an increasingly multicultural society. The plan observes that Carolina undergraduates "gain from a diverse residential environment that complements and enriches their academic work," and calls for greater enrollment of students who will "add to the geographic, intellectual, artistic, and cultural diversity of the student population." The Plan also calls upon the University to "increase diversity among faculty, students and staff," because diversity is "critical to the University's effectiveness in fully preparing students for the world."

(4) Other Statements of Guidance Regarding Undergraduate Admissions.

The principles inscribed in the Academic Plan are anticipated or echoed in many other documents endorsed by the University's Board of Trustees, Chancellor, and Faculty Council. In 1995, the Chancellor's Task Force on the Recruitment and Retention of Minority Students and Faculty emphasized the fundamental educational value of diversity and called upon the University to continue its efforts to identify, recruit, and enroll talented students of every background. In 1998, the Faculty Council passed a resolution encouraging the University to continue its efforts to recruit and enroll students of diverse backgrounds, perspectives, and experiences, since interactions within such a student body constituted a necessary precondition for educational excellence. In 200, the Chancellor's Minority Affairs Review Committee found diversity to be "a fundamental prerequisite to both educational excellence and to the University's ability to serve all the people of the state."

Finally, in 2005, after a formal, year-long assessment found "widespread agreement among students, faculty, and staff that "they [had] learned and benefited" from their interactions with colleagues from different backgrounds, the University issued its first diversity plan. The plan found that Carolina could not "achieve its educational, research, and service mission"—including its mission to prepare students to "become leaders in [a] complex world"—without a University community diverse in "social backgrounds, economic circumstances, personal characteristics, philosophical outlooks, life experiences, perspectives, beliefs, expectations, and aspirations." Calling for "the admission of students" who could contribute to such diversity, the plan also established, as an institutional goal, the "achieve[ment] of critical masses of underrepresented populations," since the absence of such critical masses "impedes the educational process" and "can place undue pressure on underrepresented students and interfere with all students' experiencing the educational benefits of a diverse learning environment."

(5) Guidelines and Procedures of the Faculty Advisory committee on Undergraduate Admissions.

The Faculty Advisory Committee on Undergraduate Admissions is delegated by the Trustees to set procedures for assessing undergraduate applications. The Committee has defined procedures designed to help the University achieve its mission by affording each candidate a series of comprehensive, holistic, and individualized evaluations. Since approving the addition of an essay to the first-year application in 1997, the Committee has acted consistently to maintain and strengthen the University's commitment to such evaluations. The Committee added a required teacher recommendation to the application in 2001; affirmed the use of comprehensive review in 2002; and, in 2003, reviewed and affirmed the University's admissions practices, including its flexible and nuanced use of race and ethnicity as one factor among many, in light of the *Gratz* and *Grutter* decisions

In addition to taking these steps, the Advisory Committee has endorsed or drafted two general statements about the practices, procedures, and criteria applicable to the University's undergraduate admissions process. Both statements ground admissions practices in the mission

of the University, mandate comprehensive and individualized evaluations for all candidates, and articulate a broad range of criteria to be used in these evaluations.

In 1998, the Committee reviewed and endorsed the Faculty Statement on Principles of Service, Diversity and Freedom of Inquiry. Adopted by the full Faculty Council in April 1998, this statement confirmed that diversity "in its many manifestations" was essential to the fulfillment of the University's educational and service missions, and that such an expansive notion of diversity required that admissions decisions include

...consideration of (1) quantifiable data and qualitative information regarding educational preparation (including, when relevant, class rank, courses, degree(s), educational program, employment, grades, major, standardized test scores, volunteer activities, and work experience); (2) life experiences (including their variety, type, uniqueness, duration, and intensity); (3) factors that may contribute to diversity of presence (including, without limitation, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation, social position, and veteran status); (4) demonstrated ability and motivation to overcome disadvantage or discrimination; (5) desire and ability to extend knowledge-based services to enhance the quality of life of all citizens; and (6) motivation and potential to make a positive contribution to the educational environment of the University and to the University's fulfillment of its mission to serve all the people of the State, to enhance the quality of life for all people in the State, and to improve conditions of human life.

In April 2007, the Committee discussed and approved a statement on the evaluation of candidates for admission. The statement endorses admissions practices that are designed to yield a "scholarly community" which in turn will help the University achieve its mission:

In evaluating candidates for undergraduate admission, the University of North Carolina at Chapel Hill seeks to shape the entering class so that its collective strengths will foster excellence within the University community; enhance the education of everyone within it; provide for the leadership of the educational, governmental, scientific, business, humanistic, artistic, and professional institutions of the state, nation and world; and enrich the lives of all the people of North Carolina.

In doing so, we aim to help the University fulfill its stated mission: to serve "the people of the state, indeed the nation, as a center for scholarship and creative endeavor," and to be "a community engaged in original inquiry and creative expression, while committed to intellectual freedom, to personal integrity, and justice, and to those values that foster enlightened leadership for the state and nation," and indeed the world.

The qualities we seek in each class are those that foster such a community, including intellect, talent, curiosity, and creativity; leadership, kindness, and courage; honesty, perseverance, perspective, and diversity. Although we expect each successful candidate to demonstrate strength in many of these areas, we do not expect every candidate to be equally strong in all of them. Just as there is no formula for admission, there is no list of qualities or characteristics that every applicant must present.

In shaping the class, we evaluate individual candidates rigorously, holistically, and sympathetically. We seek to assess the ways in which each candidate will likely contribute to the kind of campus community that will enable the University to fulfill its mission. This assessment requires not only that we note the achievements and potential of each applicant but also that we understand the context within which achievements have been realized and potential forged.

These comprehensive and individualized evaluations, taken together, do not aim to maximize any single, narrow outcome—for example, the average SAT score or the average eventual GPA of the entering class. Rather, they aim to draw together students who will enrich each other's education, strengthen the campus community, contribute to the betterment of society, and help the University achieve its broader mission.

Race-Neutral Alternatives at UNC-Chapel Hill

Prior to the convening of the working group, The Office of Undergraduate Admissions (UADM) conducted preliminary analyses of the viability of race-neutral alternatives. Using data from the fall 2012 applicant pool, UADM modeled the impact of a top 10% plan on the academic quality and diversity of the enrolling class of North Carolinians (Appendix B). According to the model, granting automatic admission to *all* North Carolina applicants with an official class rank in the top 10% of their graduating class would have led to a decline in the average SAT and predicted first-year GPA of the enrolling class, and a one percentage point gain in underrepresented minority students. The admission rate for North Carolinians who did not officially rank in the top 10% of their graduating class would have dropped from 31 to 10 percent. In the context of the applicant pool, a top 10% plan would yield a less academically qualified class, even if a slightly more diverse one.

Because the preliminary model does not account for changes in applicant behavior that might result from changes in admissions policies (i.e., students who had not previously applied under comprehensive, holistic review might apply under a top 10% plan), the working group wanted to model the impact of race-neutral alternatives on the entire population of North Carolina public high school graduates rather than those already in the applicant pool. In addition, while North Carolinians comprise 82% of the enrolling class each year – of which over 80% graduate from North Carolina Public High Schools – the preliminary analyses did not attempt to model the impact of a top 10% plan on out-of-state students or North Carolina students attending private, parochial, or independent schools. By examining the impact of race-neutral alternatives

on each sub-group of the class, we aimed to achieve a clearer understanding of the impact on the whole. Finally, although top x percent plans are frequently the most common alternatives explored, we wanted to explore other admission criteria like strength of the high school curriculum, test scores, and type of high school attended, in addition to class rank.

The working group received IRB approval (study #: 14-0605) from the University of North Carolina at Chapel Hill on May 1, 2014 to conduct an exploratory study of race-neutral alternatives in admissions using data for North Carolina Public High School graduates. We then submitted a proposal to the North Carolina Department of Public Instruction (DPI) via the North Carolina Education Research Data Center (NCERDC) on June 4, 2014 requesting data for all spring 2012 graduates of North Carolina public high schools, the most recent year for which data was available. The NCERDC approved our request on June 16, 2014 granting us access to seventeen student, teacher, school, and district level files for spring 2012 graduates. The files include data points that describe students academically (e.g. rank, test scores, number of Advanced Placement courses taken, etc) and demographically (e.g. gender, ethnicity), as well as data points that describe the socio-economic environment in which schools reside (e.g. % of students receiving free and reduced price lunch, expenditures per student, teacher turnover, etc). We paid \$2,210 dollars to NCERDC for access to the data.

Because we receive applications from students in nearly all fifty states as well as many foreign countries, it was not feasible to obtain a data set for the entire population of spring 2012 high school graduates for out-of-state students. For these groups we had to follow the methodology established by UADM in the preliminary analyses, attempting to model the impact of race-neutral alternatives using the applicant pool. Similarly, data for high school graduates of North Carolina private and parochial schools is not housed in a single location as is data for graduates of North Carolina public schools, nor do these students often have an official class rank. For this segment of the population, we obtained aggregate data from the College Board Enrollment Planning Service (EPS) for UNC's top 20 private feeder high schools; these top 20 feeder high schools account for nearly 60% of all admitted students attending NC private high schools.

Because admissions yield models are based on data available to the university only after students apply, and because we are relying on non-applicant data for NC public and private high school graduates, we cannot predict the probability of enrollment for any individual student in this study; unlike the preliminary analyses that relied on data from the applicant pool, and modeled the impact on the *enrolling* class, this analysis will rely on data from the pool of high school graduates, but model the impact of race-neutral alternatives on the *admitted* class. By modeling the impact of race-neutral alternatives on the admitted class, we are making two necessary assumptions: that the students we identify would, in fact, apply; and that their enrollment patterns would be similar to the enrollment patterns of the actual admitted class, yielding an enrolling class of comparable size.

The admitted classes that resulted from the various race-neutral alternatives explore were evaluated on two grounds – the extent to which they resulted in an admitted class of equal or greater academic quality, and the extent to which they resulted in an admitted class of equal or

greater diversity. As is outlined in our institutional mission and guiding principles, the University defines diversity broadly; in addition to race and ethnicity, diversity includes differences in social background, economic circumstance, age, philosophical outlooks, family educational attainment, sexual orientation, religion, disability, veteran status, and life experiences, among other characteristics. Because diversity manifests itself in ways that are not easily quantified, the goal of admitting and enrolling a diverse class can only be accomplished using a holistic, comprehensive, individualistic review, as is current practice. In assessing the diversity of classes admitted using race-neutral alternatives, we are necessarily focusing on diversity narrowly, in terms of race/ethnicity, and to some extent, socio-economic background. As such, this exercise cannot capture the loss of diversity, as it is more broadly defined, that might result from top x % plans, and other race-neutral alternatives.

When conducting holistic, comprehensive, and individualized review of applicants, academic potential is similarly assessed in multiple ways. Traditional, quantifiable measures like standardized test scores, GPA, and class rank are considered. But applicant essays, letters of recommendation, and extracurricular activities are taken into account as well, all of which give a more nuanced understanding of the academic achievement and potential of each student. Again, this analysis reduces academic quality to the quantifiable. Academic indicators available across data sets included class rank, percent of students taking Advanced Placement course average number of Advanced Placement courses taken, and average and middle 50% test scores.

Definitions of the variables used in the study to measure diversity and academic quality are included in appendix D. When necessary, lengthier explanations/definitions are provided to alert the reader to the ways in which the data source from which the variable was derived impacted its meaning. Finally, a note on two other important terms that merit definition: race-neutral and race-conscious. The working group referenced guidelines provided by the College Board in determining which alternatives might meet the standard of 'race-neutral' (Coleman, Palmer, & Winnick 2008). The two terms are defined as:

- 1) Race-conscious policies include two types of policies: a) those that involve explicit racial classifications; and b) those that are neutral on their face but that are motivated by a racially discriminatory purpose, resulting in racially discriminatory effects.
- 2) Race-neutral policies include two types of policies: a) those that, with respect to both operation and intent, are neutral; and b) those 'inclusive' outreach and recruitment policies that expand efforts to generate additional applicant interest, which may be facially race-conscious and/or race-conscious in intent, but which do not confer material benefits to the exclusion of non-targeted students

Thus, as the College Board points out, "facially neutral policies may in some cases actually qualify as race-conscious, given the underlying motivation" (4). Which creates the somewhat paradoxical effect, the working group notes, that any race-neutral alternative sought to achieve the same end (e.g. diversity), is not, by definition, a race-neutral alternative. As Long (2014) writes: "It would therefore seem that any policy that attempted to give weight in admissions

decisions to any other factors aside from race with the goal of boosting minority admissions would be deemed to be not 'race-neutral' and would instead be deemed 'race-conscious' and face the strict scrutiny test.' (5). Or, as Justice Ginsberg notes in her dissenting opinion in *Fisher*, "only an ostrich could regard the supposedly neutral alternatives as race unconscious. As Justice Souter observed, the vaunted alternatives suffer from 'the disadvantage of deliberate obfuscation.'"

Despite this inherent tension between race-neutral and race-conscious, the working group selected alternatives in the context of the following: 1) by taking note of alternatives implemented by peer institutions in other states; 2) by paying attention to the research literature, which documents actual and simulated results of race-neutral alternatives; 3) by drawing on our own knowledge/research about which factors predict academic success at UNC-Chapel Hill; 4) by considering which alternatives would be practicable/feasible in their implementation; and 5) by choosing those alternatives most likely to bear results in line with other institutional goals.

(1) Preliminary Results NC Public

A. Top 10% Plan

The first race-neutral alternative the working group explored was a top 10% plan, granting automatic admission to all NC public high school graduates ranked in the top 10% of their high school class. This yielded an admitted class nearly double the size of the actual admitted class, making it an unviable alternative. Given the popularity of top 10% plans, however, we decided to compare the demographic and academic characteristics of this population to the actual admitted class as an exploratory and information gathering exercise. By all available indicators, the ethnic/racial diversity of the top 10% pool is equal to that of the admitted class - 16.7% underrepresented minority compared to 16.4%, and 30.4% non-white compared to 30.6%. In terms of geographic diversity, all 100 NC counties are represented by the top 10% plan, only 98 in the actual admitted class. A larger share of the top 10% are attending schools with more than 50% of students on free-and-reduced-price lunch – 38.4% compared to 20.2% suggesting greater socio-economic diversity. The academic quality of the top 10%, however, falls short relative to the actual admitted class. A smaller proportion of students are pursuing Advanced Placement courses – 71.8% of the top 10% are taking at least one, compared to 99.0% of the actual admitted class – and they're taking fewer overall - five on average, compared to nearly eight in the admitted class. The average SAT (CR+M) of the top 10% class is 130 points lower than the actual admitted class as well.

B. Top 4.5% Plan

We continued to explore top x % plans; for our second attempt, we determined that granting automatic admission to the top 4.5% of all NC public high school graduates yielded an admitted class of 4,040 students, compared to the actual admitted class of 4,097. Although nearly equal in size, the top 4.5% admitted class is both less diverse and less academically qualified than the actual admitted class. The average SAT (CR+M) of the top 4.5% is 75 points lower than the actual admitted class, and less than half of those ranked in the top 4.5% are taking

5 or more AP courses, compared to 92% of students in the admitted group. Only 24% of students identify as non-white, compared to 30.6% in the admitted class; the proportion of underrepresented minorities dropped more than two percentage points as well.

C. Top x % & Socioeconomic Diversity Plan

In our third and final top x % plan, we incorporated socioeconomic diversity as part of the admissions criteria, granting automatic admission to the top 7.5% a students attending high-poverty schools, and the top 3% attending low poverty schools. Although this increased the representation of underrepresented minority students from 16.4 to 17.8%, and increased socioeconomic diversity as measured by the proportion of students attending high poverty schools, the academic quality of this group suffered. The average SAT (CR+M) dropped over 100 points relative to the actual admitted class, and only 40% of these students pursued a curriculum of 5 or more AP courses.

D. Strength of Curriculum Plan

Previous research conducted by UADM suggests that students who take five college level courses throughout their high school career perform just as well as their peers who pursue more extreme programs (Kretchmar & Farmer 2013). Students who don't pursue any college-level work, however, don't perform as well as those who take five or more. On the basis of this finding, we used strength of high school curriculum rather than class rank as the criterion for admission; in order to admit a class equal in size to the actual admitted class, a testing threshold of 1150 SAT or higher was added as well. Granting automatic admission to all NC public HS graduates pursuing 5 or more AP courses who have also met the testing criterion yielded an admitted class of 4,108 students. This group of students earned an average SAT just 4 points lower than the actual admitted class, and pursued an equally rigorous curriculum. Although a smaller proportion are ranked in the top 10% of the class, they come closest to mirroring the overall academic quality of the actual admitted class. The diversity of the group, however, declined significantly. Only 6.4% of the class identified as underrepresented minority, and only 12.7% attended a high school with more than 50% of students qualifying for free-and-reduced-price lunch. In addition, these students represented just 81 of the 100 North Carolina counties.

E. Testing Plan.

Lastly, we examined the academic qualifications and diversity of a class admitted on the basis of test scores alone, granting automatic admission to all students earning a combined score of 1280 or higher on the Critical Reading and Math portions of the SAT. The resulting class would outpace the actual admitted class in terms of testing (by 60 points, on average), but would fall short on class rank and strength of the curriculum. Diversity would be significantly compromised, with declines in geographic, socioeconomic, and racial/ethnic diversity. Only 4.8% of this group identified as underrepresented minority, only 11.8% attended a high-poverty school, and only 91 North Carolina counties would be represented.

(2) Preliminary Results – Out-of-state Students

A. Top 10% Plan

Admitting all students in the out-of-state applicant pool with an official class rank of top 10% or higher yielded an admitted class two-thousand students larger than the actual out-of-state admitted class. Even so, only 43% of the out-of-state applicant pool reported an official class rank, which means many viable candidates were excluded from consideration altogether. Thus, although not likely a viable alternative, we approached this model as an exploratory and information gathering exercise.

Although less racially/ethnically diverse – the percent of underrepresented minorities drops from 27.1% to 14.7% - a larger proportion of the top 10% requested fee waivers and were first-generation-college. Academically they pursued nearly as rigorous a curriculum as the actual admitted class, but a smaller proportion were ranked in the top 5 and 3% of their class, and their average SAT was 100 points lower.

B. Top 5% and Testing Threshold

In order to achieve a class size similar to the size of the actual admitted class, we combined a testing and class rank threshold, granting automatic admission to anyone ranked in the top 5% of their class with a combined score on the Critical Reading and Math portion of the SAT of 1230 or higher; this yielded 2,880 students, just five more than the actual admitted group. Although comparable in size and academic quality, only 5.4% of this group identified as underrepresented minority, compared to 27.1% of the actual admitted class.

C. High School Grades (Performance = 10) and Testing Threshold

In order to include students not reporting official ranks, we developed a threshold based on test scores and high school grades, granting automatic admission to all applicants with straight A's in their four years of high school who also earned a combined score on the Critical Reading and Math portion of the SAT of 1220 or higher. Again, this yielded a class similar in academic quality, with nearly equal test scores and strength of curriculum. Of those reporting an official rank, a higher proportion were ranked in the top 5 and 3%, relative to the actual admitted class. But again, diversity was compromised. A higher proportion were non-resident alien — 16.3 percent compared to 10.6 percent — but only 7.2 percent identified as underrepresented minority and 33.2 percent as non-white, compared to 27.1 and 51.1 percent in the actual admitted class, respectively.

(3) Preliminary Results – NC Private

Because so few students attending North Carolina private and parochial high schools report official class ranks, modeling a top x % plan with this segment of our population was not feasible. Instead, we pulled aggregate academic and demographic data from the College Board for each of our top 20 NC private feeder high schools; these 20 schools accounted for 60% of all admitted students from NC private high schools. For each school, we calculated the percent non-

white, percent underrepresented minority, the average SAT (Note: the average SAT for each school was approximated based on number of graduating students in each SAT band), percent first-generation college, percent taking at least 1 AP course, and average number of AP courses taken for the graduating class. In order to model a hypothetical admitted class on the basis of our top 20 feeder schools, we then weighted these indicators by the number of students graduating from each high school. In essence, the resulting profile is an estimate of the profile of all NC private high school graduates, as reasonably as it can be approximated.

The hypothetical class was similar to our actual NC private admits in terms of diversity – 9.0% underrepresented minority compared to 9.8% in the actual class and 17.5% non-white compared to 19.8%. And a larger proportion were first-generation college. Academic quality, however, declined – with an estimated 200 point drop in SAT, and a 25 percentage point drop in the number of students taking at least 1 AP. Strength of curriculum, in general, declined with students from the top 20 feeder schools pursuing, on average, 3 college level courses, compared to students in our actual admitted class, who pursued 6, on average.

In sum, no single model, applied to any three of the segments of our population, would produce an admitted class that is equal to or stronger than our actual admitted class in terms of *both* diversity and academic quality. Some of the alternatives mirror or exceed the actual admitted class in terms of diversity, but not academics, or vice versa, but no alternative allows us to achieve the same level of excellence *and* diversity as our current practice of holistic review.

(4) Applications Quest

Two members of the working group – Barbara Polk (chair) and Jennifer Kretchmar – attended a webinar on October 23, 2014 hosted by Dr. Juan Gilbert of the University of Florida, developer of a patented software program called Applications Quest. Applications Quest is described as a holistic review software program designed to maximize diversity without giving preferential treatment to applicants on the basis of race. After speaking with Dr. Gilbert, Ms. Polk and Ms. Kretchmar shared the information they learned with other members of the working group for the purpose of deciding whether to conduct a pilot study.

In general terms, Applications Quest works by creating clusters of students from the available applicant pool; similarities among applicants are maximized within clusters, thereby maximizing differences between clusters. The number of clusters created corresponds to the number of offers of admission being made; the member of the cluster who is "most different" from the other members is identified for admission. Differences and similarities are determined using any nominal or numeric variables identified as relevant and/or important by the admissions staff (e.g. race, nationality, major, family income, etc). Significantly, no single factor is weighted more heavily than another, so that no applicant receives preferential treatment on the basis of any single characteristic.

The software gives admissions staff the capability of entering minimum admissions standards using one or more variables. If no standards are used, the average academic

qualifications of the selected group will generally mirror the average academic qualifications of the applicant pool. When using more than one minimum standard, standards can be set using 'and' or 'or' statements (e.g. GPA >=3.0 and SAT>=1200, GPA >=3.0 or SAT>=1200). Students who do not meet the minimum standards are dropped from the applicant pool. Any students who are admitted despite not having met the minimum standards, referred to here as 'exceptions,' are also removed from the applicant pool.

The working group foresaw a number of significant obstacles to adapting Applications Quest to our needs. First, the software would require the use of predefined, minimum standards in order to select an admitted class with comparable academic quality to the one selected using individualized, holistic review. The standards are rigid and mechanistic, such that anyone who falls below them is automatically disqualified from further consideration. Pre-defined cut-offs are antithetical to our guiding principles and mission. Just as individualized, holistic review protects students from race or ethnicity becoming the defining feature of his/her application, individualized, holistic review protects students from *any* single variable – such as a test score or GPA - becoming the defining feature of his/her application. As stated in our guidelines for evaluating candidates, "there is no list of qualities or characteristics that *every* student must present."

Second, the implementation of Applications Quest would essentially result in a tri-partite admissions model, such that different groups of students would be subjected to different processes and/or standards – the group falling below the minimum standards evaluated in a formulaic, mechanistic way; the second group evaluated using Applications Quest; and the third, the 'exceptions,' according to other standards/processes altogether. This too, is at cross-purposes with our current practices, in which every candidate receives the same individualized, holistic review and is evaluated according to the same standards.

Appendix A. Members of Race-Neutral Alternatives Working Committee

Patrick Akos
Taffye Clayton
Jennifer Kretchmar
Lou Perez
Catherine Pierce
Barbara Polk
Kara Simmons
Debby Stroman
Lynn Williford

Appendix B. Preliminary Analysis of Race-Neutral Alternatives

Our goal for the fall 2012 first-year class was 3,960 students, including 3,247 from North Carolina. More than 10,000 North Carolinians applied. Fifty percent of those who applied were offered admission; 65 percent of those admitted will enroll.

The applicants from North Carolina included 4,179 whose high schools reported official class rank and who ranked within the top 10 percent of their graduating class.

Through the practice of comprehensive review described in our reading document, 3,194 of these students, or 76 percent, were offered admission. Of these students, 2,117, or 66 percent of those admitted, have accepted our offer of admission and will enroll next fall. These enrolling students will comprise 65 percent of the 3,247 North Carolinians in the entering first-year class.

If we had offered admission to all 4,179 of the top-10-percent North Carolinians who applied, our yield model projects that we would have enrolled an additional 751 students, increasing the number of top-10-percent students in the entering class to 2,868, or 88 percent of all North Carolinians enrolling.

A total of 379 spaces would have remained for the more than 5,800 other North Carolinians applied. Assuming that 65 percent of the students admitted from this group would have enrolled, we would have needed to offer admission to 583 students. The resulting admission rate for North Carolinians who did not officially rank in the top 10 percent of their graduating class would have been 10 percent, as opposed to a rate of 31 percent under comprehensive review. The students denied would have included hundreds of non-underrepresented minority students attending independent high schools and public magnet and suburban high schools—students who were admitted under comprehensive review.

A top-10-percent policy would have yielded a first-year class with a higher percentage of underrepresented students: 16 percent vs. 15 percent under comprehensive and holistic review. In effect, more non-underrepresented students would have been denied admission under a top-10-percent policy than under comprehensive and holistic review.

Under a top-10-percent policy, every academic indicator other than the share of the class ranking in the top 10 percent of the high-school class would have declined. For example, the average SAT (Critical Reading and Math combined) would have been 1262, as opposed to 1317 under comprehensive and holistic review.

The predicted GPA of the class after the first year at UNC would also have declined to 3.16 from 3.26 under comprehensive review.

C. Mission Statement of the University of North Carolina at Chapel Hill

The University of North Carolina at Chapel Hill, the nation's first public university, serves North Carolina, the United States, and the world through teaching, research, and public service. We embrace an unwavering commitment to excellence as one of the world's great research universities.

Our mission is to serve as a center for research, scholarship, and creativity and to teach a diverse community of undergraduate, graduate, and professional students to become the next generation of leaders. Through the efforts of our exceptional faculty and staff, and with generous support from North Carolina's citizens, we invest our knowledge and resources to enhance access to learning and to foster the success and prosperity of each rising generation. We also extend knowledge-based services and other resources of the University to the citizens of North Carolina and their institutions to enhance the quality of life for all people in the State.

With lux, *libertas*—light and liberty—as its founding principles, the University has charted a bold course of leading change to improve society and to help solve the world's greatest problems.

Approved by the UNC Board of Governors, November 2009

Appendix D. Data Definitions

Application Fee Waiver. Granted to students for whom the \$80 dollar application fee presents a financial hardship; student must submit College Board fee waiver form or a letter from a school official requesting fee waiver on student's behalf.

Class rank. A student's numeric position in their high school class, based on grade point average. Often expressed as percentile, or the student's numeric position divided by the total number of students in the class.

First Generation College. Student for whom neither parent and/or legal guardian has attained a four-year degree.

Free and Reduced Price Lunch. Federally-assisted meal program operating in public and nonprofit private schools and residential child care institutions, providing nutritionally balanced, low-cost or free lunches to children each school day.

Non-white. Any racial/ethnic category other than Caucasian, including African-American, Asian-American, Hispanic/Latino, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, or any combination thereof. Percent non-white is calculated by dividing number of nowhite by the total number of students (as opposed to total number of students reporting a race/ethnicity).

Highest Reported Score. Highest official score earned by each student on either the SAT (Critical Reading and Math combined) or the ACT Composite, with the ACT Composite converted to the SAT Critical Reading and Math scale using the standard concordance table approved by the College Board and ACT. This method of summarizing test scores best represents the way that scores are used by the University. Under guidelines for standardized testing approved by the Advisory Committee on Undergraduate Admissions, when any candidate for admission submits results from both the SAT and the ACT, the University considers the test with the stronger results.

North Carolina County. One of the one hundred counties located in the state of North Carolina.

Middle 50% SAT (CR+M). The values between which 50% of all SAT (CR+M) scores in the group fall.

Performance rating. A 1-10 rating given to each applicant to UNC-Chapel Hill as a measure of high school grades/performance. A student who has earned straight A's in all four years of high school is scored a 10; a student earning 1-2 B's is scored a 9; a student earning 3-4 B's is scored an 8, a student presenting an even mix of A's and B's earns a 4. The scale is calibrated to our applicant pool, such that the lower values typically represent students with C's and D's, rather than students with failing grades.

Program rating. A 1-10 rating given to each applicant to UNC-Chapel Hill as an indicator of the strength of a student's high school curriculum. Strength is measured as a function of the number of college-level courses (Advanced Placement, International Baccalaureate, Dual Enrollment) pursued between 9th and 12th grades. A student with 10 or more college-level courses is scored a 10, a student with 1 to 3 college-level courses is scored a 3, while students with no college level courses are scored a 1 or 2.

The average program rating for all actual and hypothetical admitted classes derived from our applicant data is a proxy for average number of college-level courses pursued during high school. Because many of our students take more than 10 college-level courses, the proxy is likely an underestimate. The average program rating for hypothetical admitted classes derived from data provided by the Department of Public Instruction or the College Board is based on participation in Advanced Placement Courses only. While the average for these students is based on an actual count of AP courses taken (as opposed to an average of score given on the 1-10 scale described above), it is still an underestimate of participation in college-level courses given the absence of data on participation in International Baccalaureate and Dual Enrollment courses.

SAT (CR+M). Score earned by student on the Critical Reading and Math portion of the SAT. Average SAT scores for NC public and private *actual* admitted classes are calculated using all reported scores, regardless of whether or not a student reported a higher ACT score. Although this isn't representative of the way we use scores in the admissions process (see *highest score reported*), this method of calculating makes for a more fair comparison to average SAT scores calculated for NC public and private hypothetical admitted classes, since ACT data is not available for those populations.

Top 10%. Student who is ranked in the top 10% of his/her high school class.

Top 5%. Student who is ranked in the top 5% of his/her high school class.

Top 3%. Student who is ranked in the top 3% of his/her high school class.

Underrepresented minority. Any student who identifies as African-American, Hispanic/Latino, and/or American Indian/Alaskan Native.

References

- Bok, D. (2000). Assessing the results of race-sensitive college admissions. *The Journal of Blacks in Higher Education*, 29, 106-111.
- Brown, S.K., & Hirschman, C. (2006). The end of affirmative action in Washington State and its impact on the transition from high school to college. *Sociology of Education*, 79, 106-130.
- Card, D., & Krueger, A.B. (2004). Would the elimination of affirmative action affect highly qualified minority applicants? Evidence from California and Texas. Industrial and Labor Relations Review, 93(3), 858-872.
- Chan, J., &Eyster, E. (2003). Does banning affirmative action lower college student quality? American Economic Review, 93(3), 858-72.
- Chapa, J., & Horn, C.L. (2007). Is anything race-neutral? Comparing 'race-neutral' admissions policies at the University of Texas and the University of California. Los Angeles, CA: The Civil Rights Project, UCLA.
- Coleman, A.L., Palmer, S.R., & Winnick, S.Y. (2008). Race-Neutral Policies in Higher Education: From Theory to Action. A Policy Paper Prepared in Conjunction with the College Board's Access and Diversity Collaborative.
- Epenshade, T.J., & Chung, Y.C. (2005). The opportunity cost of admission preferences at Elite Universities. Social Science Quarterly, 86(2), 293-305.
- Furstenburg, E. (2009). Academic outcomes and Texas' Top Ten Percent Law. ANNALS of the American Academy of Political and Social Science, X, XX.
- Harris, A., & Tienda, M. (2009). Minority higher education pipeline: Consequences of changes in college admissions policy in Texas. *ANNALS of the American Academy of Political and Social Science*, 627, XX.
- Hinrichs, P. (2010). The effects of affirmative action bans on college enrollment, educational attainment, and the demographic composition of universities. *The Review of Economics and Statistics*, 94 (3), 712-722.
- Howell, J.S. (2010). Assessing the Impact of Eliminating Affirmative Action in Higher Education. *Journal of Labor Economics*, 28(1), 113-166.
- Koretz, D., Russell, M., Shin, C.D., Horn, C., & Shasby, K. (2002). Testing and diversity in postsecondary education: The case of California. Education Policy Analysis Archives, 10(1).

- Kretchmar, J., & Farmer, S. (2013). How much is enough? Rethinking the role of high school courses in college admission. *Journal of College Admissions*, 220, 28-33.
- Long, M.C. (2014). Is there a 'workable' race-neutral alternative to affirmative action in college admissions? *Journal of Policy Analysis and Management*, 00, 1-23.
- Long, M.C., Saenz, V., & Tienda, M. (2009). Policy transparency and college enrollment: Did the Texas Top 10% Law broaden access to the public flagship? *ANNALS of the American Academy of Political and Social Science, X, XX*.
- Long, M.C., & Tienda, M. (2008). Winners and losers: Changes in Texas University admissions post-Hopwood. *Educational Evaluation and Policy Analysis*, 30, 255-280.
- Long, M.C. (2007). Affirmative action and its alternatives in public universities? What do we know? *Public Administration Review*, 67(2), 315-330.
- Long, M.C. (2004). College applications and the effect of affirmative action. *Journal of Econometrics*, 121(1-2), 319-342.
- Niu, S.X., Tienda, M., & Cortes, K. (2006). College selectivity and the Texas top 10% Law: How Constrained are the Options?" *Economics of Education Review*. 25(3): 259-272.
- Orfield, G. (2007). Foreword. In Gary Orfield, Patricia Marin, Stella Flores, & Liliana Garces (Eds.), Charting the Future of College Affirmative Action (pp. xi xiv). Los Angeles, CA: The Civil Rights Project at UCLA.
- The Century Foundation. (2003). Socioeconomic status, race/ethnicity, and selective college admissions. New York, NY: Carnevale, A.P., & Rose, S.J.
- The Century Foundation. (2003). Economic affirmative action in college admissions. New York, NY: Kahlenberg, R.
- Tienda, M., Leicht, K.T., Sullivan, T., Maltese, M., & Lloyd, K. (2003). Closing the gap?

 Admissions and enrollments at the Texas Public Flagships before and after affirmative action. Unpublished manuscript.
- Rendon, L.I., Novack, V., & Dowell, D. (2004). Testing race-neutral admissions models: Lessons from California State University-Long Beach. The Review of Higher Education, 28(2), 221-243.
- St. John, E.P., Simmons, A.B., & Musoba, G.D. (2002). Merit-aware admissions in public universities. Thought and Action, 17(2), 35-46.
- Steinecke, A., Beaudreau, J., Bletzinger, R.B., & Terrell, C. (2007). Race-neutral admission approaches: Challenges and opportunities for medical schools. Academic Medicine, 82(2), 117-126.

- U.S. Department of Education. (2004). Achieving diversity: Race-neutral alternatives in American education (Publication No. ?). Washington, DC: Government Printing Office.
- U.S. Department of Education. (2003). Race-neutral alternatives in postsecondary education: Innovative approaches to diversity (Publication No. HE 035 789). Washington, DC: Government Printing Office.

Appendix F Charges for the Three Working Subcommittees

CHARGE FOR THE LITERATURE REVIEW SUBCOMMITTEE

December 16, 2016 (updated January 13, 2017)

This Subcommittee shall perform a literature review to provide the Committee with a better understanding of the research that the University should undertake to continually assess its need for race-conscious admissions strategies. The literature review shall address questions such as the following:

- The previous UNC-Chapel Hill working group on race-neutral strategies wrote a report that included a literature review of studies on universities' need for race-conscious admissions programs. What studies have been published since that working group's previous literature review?
- What are race-neutral admissions strategies that have been adopted by other schools, especially peer schools and aspirational target schools? Should UNC-Chapel Hill study the potential effects of adopting of these practices?
- What has been said in academic literature and public policy reports about the types of studies a university should conduct to assess its need for race-conscious admissions?
- Has there been any discussion in court documents (e.g., briefs and judicial opinions) about the types of studies a university should conduct to assess its need for raceconscious admissions?

Proposed next steps

- Hire a research assistant from the School of Law by early February. This assistant can work up to 20 hours per week.
- Hire another research assistant with expertise in quantitative methods by late early March.

Subcommittee Members

Professor Holning Lau (School of Law), chair Research Assistants from the School of Law

CHARGE FOR THE DATA ANALYTICS SUBCOMMITTEE

The Data Analytics Subcommittee of the Race-Neutral Strategies Task Force is charged to:

- 1. Identify available data sources and different, feasible analytic approaches that could support the careful consideration of race-neutral approaches in undergraduate admissions at the University of North Carolina at Chapel Hill.
- 2. Empirically evaluate these analytic approaches and their ability to achieve important institutional outcomes for incoming undergraduate classes.
- 3. Provide regular updates and data reports to the larger Race-Neutral Strategies Committee so that broad input may be provided about the different analytic approaches, legal context, direction, and findings.

Subcommittee Members

Professor Michael Kosorok (Biostatistics and Statistics and Operations Research) and Patrick Curran (Psychology and Neuroscience), co-chairs

CHARGE FOR THE IMPACT OF DIVERSITY ON THE STUDENT EXPERIENCE SUBCOMMITTEE

The subcommittee is charged with gathering the perspectives of current students on their educational experiences at the University, particularly as it relates to how diversity has contributed to their overall experience at UNC. Student perspectives will be pulled from a variety of sources, including institutional and departmental surveys related to student engagement, student responses from the campus climate survey, along with institutional demographic information by College, School, department and major. A review of the literature on the impact of diversity on the student experience will also be conducted.

Action Items

Aggregate and synthesize responses to diversity related questions related to student engagement from the following institutional and departmental assessments.

- Cooperative Institutional Research Program (CIRP) first-year survey
- Student Experience in the Research University (SERU) student engagement
- Multi-Institutional Study of Leadership (MSL)
- Campus Climate Survey for UNC Undergraduate Students
- Arts and Sciences Foundation Alumni Survey
- Departmental assessments with diversity specific questions
- Disaggregate data by race and gender
 - o Department/School/College
- Retention by department by race and gender
- Racial make-up by major
- Common themes across instruments
- What questions have not been asked?

Note: Undergraduate Education has the data on retention and racial make-up by department

Subcommittee Members

Hazael Andrew, Assistant Director of Carolina Housing

Belinda Locke, Ph.D., Coordinator of Assessment and Strategic Planning for Student Affairs Bettina Shuford, Ph.D., Associate Vice Chancellor for Student Affairs, Chair Jared Ward, Coordinator of Co-curricular Learning & Assessment, Carolina Union Ada Wilson, former Director of Inclusive Student Excellence, Office of Diversity and Inclusion

Appendix G Interim Reports for the Literature Review Subcommittee, the Data Analytics Subcommittee, and the Student Experience Subcommittee

INTERIM REPORT FOR THE LITERATURE REVIEW SUBCOMMITTEE3

I. Executive Summary

My research assistants⁴ and I reviewed literature about three race-neutral admission strategies: (1) percent plans, (2) socioeconomic affirmative action programs, and (3) race-neutral diversity essays. These strategies can be "race-conscious," meaning that schools can adopt these strategies with the aim of securing a racially diverse student body. These strategies are, however, "race-neutral" in that they do not overtly differentiate applicants by race. This literature review focuses on publications that were not captured in the previous review that the Committee on Race-Neutral Strategies performed for its 2016 report.

The research we reviewed suggests that percent plans are unlikely to be effective and efficient substitutes for admission strategies that overtly consider race. For example, research on the University of Texas at Austin's percent plan is, at best, inconclusive regarding the program's effectiveness. While Black and Latino representation among admitted students increased after the University of Texas adopted its percent plan, that increase may be attributable to demographic changes in Texas as opposed to the percent plan. Moreover, even if a percent plan produces a racially diverse class, it does so inefficiently: by admitting students based on class rank alone, universities must ignore other aspects of student quality that it might consider important (e.g., standardized test scores, extracurricular activities, leadership skills, resilience, etc.). Similarly, research generally suggests that socioeconomic affirmative action programs—which grant preferential treatment to applicants from disadvantaged socioeconomic backgrounds—are also unlikely to produce desired levels of racial diversity effectively and efficiently. Meanwhile, there is a dearth of literature on the effects of race-neutral diversity essays.

Although research casts doubt on the utility of these race-neutral strategies as complete substitutes for overt considerations of race, the Committee on Race-Neutral Strategies should still examine their appropriateness specifically for UNC-Chapel Hill. For its 2016 report, the Committee conducted simulation-based evaluations of implementing various percent plans at UNC-Chapel Hill. Those simulations can be updated and expanded. The Committee should also run simulations of socioeconomic affirmative action programs, perhaps drawing inspiration from the "Disadvantage Index" used by the University of Colorado at Boulder's admissions office. Finally, the Committee should consider having further discussions about the advantages and disadvantages of race-neutral diversity essays, but there is very little existing empirical research to inform such discussions.

This memo describes the three categories of race-neutral strategies that we studied. It provides background information on how universities can operationalize these strategies. It also summarizes the literature that we reviewed concerning each strategy's pros and cons.

II. Percent Plans

³ This section was written by Professor Holning Lau (School of Law) with input from the Committee.

⁴ Thank you to research assistants Hillary Li, Zachary Layne, and Kerry Dutra. All three were students at UNC School of Law when they provided assistance on this report.

Percent plans are perhaps the most well-known form of race-neutral strategy because of the recent Supreme Court case *of Fisher v. University of Texas*,⁵ as well as media coverage of that case. This litigation drew attention to the University of Texas at Austin's percent plan. Percent plans are admissions practices in which a certain percentage of students in every high school in the state are automatically admitted to the state university system. Because high schools tend to be de facto segregated by race, percent plans indirectly produce some degree of racial diversity among admitted students. Flores and Horn have written a helpful literature review on percent plans.⁶ The following summary of research draws extensively from their review.

A. Existing Percent Plans

California, Florida, and Texas have adopted percent plans for their public university systems. California and Florida guarantee that the top-9 and top-20 percent of high school students in their states, respectively, will be admitted into their state's university system. These students are not, however, guaranteed admission to any particular campus within their statewide university systems. Public universities in these two states fill the remainder of their student bodies based on a range of other characteristics, but they do not overtly consider race.

Unlike California and Florida, Texas maintains a system in which the top-10 percent of high school students are admitted into the University of Texas campus *of their choice*. Until 1996, UT Austin gave preferential treatment to racial minorities when making admissions decisions. That year, in *Hopwood v. Texas*, the Court of Appeals for the Fifth Circuit invalidated this racial affirmative action program. In response, UT Austin eventually began accepting most of its students through Texas's Top Ten Percent Plan, while filling the remainder of its class through a race-neutral holistic review. It later made a change, accepting most of its class through the Top Ten Percent Place, while filling the remainder of its class through a holistic review that overtly considers race. This overt consideration of race was challenged in *Fisher v. University of Texas at Austin*. The Supreme Court ultimately held that UT Austin was constitutionally permitted to consider race in its holistic review of applicants who were not admitted via the Top Ten Percent Plan. Plan.

B. Evaluating Percent Plans

After the percent plans in California and Florida went into effect, enrollment of Blacks and Latinos in both states' public university systems grew in absolute numbers; this increase in enrolled minority students also outpaced the increase in enrollment of White students. The increased enrollments of minority students may, however, be a result of demographic changes

⁵ See Fisher v. University of Texas at Austin (Fisher II), 136 S. Ct. 2198 (2016); Fisher v. University of Texas at Austin (Fisher I), 133 S. Ct. 2411 (2013).

⁶ Stella M. Flores & Catherine L. Horne, "Texas Top Ten Percent Plan: How It Works, What Are Its Limits, and Recommendations to Consider," Education Testing Service, 2015.

⁷ See Hopwood v. Texas, 78 F.3d 932, 934–935, 948.

⁸ Fisher ÎI, 136 S. Ct. at 2214.

⁹ Eang L. Ngov, "Following *Fisher*: Narrowly Tailoring Affirmative Action," 64 *Catholic University Law Review* 1, 13-15 (2014).

and other factors exogenous to the percent plans.¹⁰ Notably, the percent plans in California and Florida only guarantee students admission to the public university system, but not the campus of their choosing within the university system. Research suggests that these states' percent plans have had little effect on diversity at the states' flagship campuses.¹¹

UT Austin presents a particularly noteworthy case study because it has been the focus of litigation and a great deal of research. When UT Austin used its Top Ten Percent Plan in conjunction with race-neutral holistic review, the percentage of Blacks and Latinos in the student body increased to the levels that had existed when UT Austin used overt racial preferences in the pre-*Hopwood* era. Research suggests, however, that this increase can be attributed to demographic changes in Texas. As Flores and Hornes, explained: "ignoring the dramatic changes in the high school graduate population gives the appearance of substantially restoring access for students of color to levels before the percent plan [in the pre-*Hopwood* era; however]. . . in reality, for a much larger population and share of students of color, it has actually declined." declined."

Even though UT Austin was able to attain pre-*Hopwood* levels of diversity by coupling its Top Ten Percent Plan with race-neutral holistic review, the Supreme Court in *Fisher v. Texas* accepted that this level of diversity did not necessarily constitute a "critical mass" of minority students. The Court did not clearly define "critical mass." It did, however, note two factors that can be taken into consideration in evaluating whether a critical mass exists: (1) whether minority students continue to experience "feelings of loneliness and isolation, ¹⁶ and (2) the level of diversity within university subpopulations (e.g., schools, departments, and classes). ¹⁷ Even if percent plans are effective in generating racial diversity, there are tradeoffs that policymakers ought to consider. First, if a university were to fill too many of its seats through a

¹⁰ See *id.* at 14 (acknowledging that "it is difficult to determine whether the increase in minority enrollment is due to population growth in California . . ."); Richard D. Kahlenberg & Halley Potter, "A Better Affirmative Action: State Universities that Created Alternatives to Racial Preferences," Century Foundation (2012), at 45 (reviewing studies suggesting that there are only a small number of students who are admitted to Florida's university system and also would not have been admitted based on grades and standardized test scores alone). It is also difficult to isolate the effects of California's and Florida's percent plans because both states take into consideration socioeconomic factors when admitting students who are not accepted based on the percent plans; this consideration of socioeconomic factors may also influence the diversity of enrolled students. For background on reforms to California's and Florida's admissions strategies over the years, see *id.* at 33-35, 44-46.

¹¹ See Richard D. Kahlenberg, "Achieve Better Diversity: Reforming Affirmative Action in Higher Education," Century Foundation (2015), at 12 (noting that UC Berkeley and UCLA "were not able to sustain prior levels of racial and ethnic diversity using race-neutral alternatives . . . "; Patricia Marin & Edgar K. Lee, "Appearance and Reality in the Sunshine State: The Talented 20 Program in Florida," Civil Rights Project at Harvard University (2003), at 29-37 (questioning whether Florida's percent plan had any effect on minority enrollment at the University of Florida and Florida State University). See also Catherine L. Horn & Stella M. Flores, "Percent Plans in College Admissions: A Comparative Analysis of Three States' Experiences," Harvard Civil Rights Project (2003), at 50 ("data, albeit scarce in the case of California and Florida, suggest that percent plans have fallen well short of creating diverse flagship campuses . . .").

¹² Fisher I, 133 S.Ct. at 2416.

¹³ Flores & Horne, note 6, at 11.

 $^{^{14}}$ Id.

¹⁵ Fisher II, 136 S. Ct at 2211-2212.

¹⁶ *Id.* at 2212.

¹⁷ See *id*.

percent plan, that university will need to sacrifice aspects of diversity that percent plans fail to produce. ¹⁸ If a school were to fill its entire class through a mechanistic percent plan, it would lose the ability to admit students who are just shy of the class-rank cutoff, but would otherwise contribute to diversity in meaningful ways. For example, someone who misses the class-rank cutoff might be a violin virtuoso who would contribute the university's diversity of talents; or she might be a someone whose race, religion and sexual orientation intersect in ways that would contribute to diversity of life experiences; or she might be an individual who overcame a life-threatening illness and now holds a perspective that is rare among her peers.

Another potential tradeoff of percent plans is the degradation of the student body's academic preparedness. ¹⁹ By requiring schools to admit some students from underperforming high schools, schools may be forced to compromise the academic quality of their entering classes.

III. Socioeconomic Status Affirmative Action

In socioeconomic affirmative action, applicants from disadvantaged socioeconomic backgrounds are given some preferential treatment. Socioeconomic affirmative action contributes not only to a student body's socioeconomic diversity, but also potentially to racial diversity because class correlates with race.

The literature on socioeconomic affirmative action suggests that a socioeconomic affirmative action program's effectiveness and efficiency in generating racial diversity hinge on two factors: (1) the way in which the program defines socioeconomic status, and (2) the weight of the preference given to students based on socioeconomic status. Most research suggests that socioeconomic affirmative action programs do not generate racial diversity as effectively and efficiently as affirmative action programs that overtly consider applicants' race.

A. Designing Socioeconomic Affirmative Action

When designing a socioeconomic affirmative action program, the first decision to consider is how to define socioeconomic status (SES). Defining SES by income alone is unlikely to create an affirmative action program that greatly enhances racial diversity because racial minority families constitute only a small percentage of the country's low-income families. Beyond income, there are many variables—indeed a seemingly endless number of SES variables—that correlate with race. Commentators have suggested that socioeconomic affirmative action programs are more likely to produce racial diversity if the programs account for a range of SES factors at the family and structural levels. Family-level SES factors include not only parental income, but also factors that correlate more closely with race, such as family wealth and net

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¹⁸ See id. at 2213.

¹⁹ For discussions about how race-neutral admission strategies may compromise the academic quality of the enrolled study body, see Flores & Horne, note 6, at 12-13; Mark C. Long, "Is There a 'Workable' Race-Neutral Alternative to Affirmative Action in College Admissions?," 34 *Journal of Policy Analysis & Management* 162 (2015).

²⁰ See Brian T. Fitzpatrick, "Is the Future of Affirmative Action Race-Neutral?," in Samuel Bagenstos & Ellen Katz, eds., *Nation of Widening Opportunities: The Civil Rights Act at Fifty* (University of Michigan Press 2015), at 150-151.

²¹ See, e.g., Kahlenberg & Potter, note 10, at 15-18.

worth. Structural-level factors include high school-based and neighborhood-based measures of poverty.

While most universities have not developed very sophisticated socioeconomic affirmative action programs, researchers point to the University of Colorado at Boulder ("CU") as an outlier. ²² CU's program is an example of how universities can methodically account for a variety of SES factors. CU rates each applicant on a Disadvantage Index that includes four "Student Level SES Factors" and four "High School Level SES Factors." The Student Level factors are (1) whether the applicant's native language is English, (2) parents' highest education level, (3) family income level, and (4) the number of dependents in the family. The High School Level factors are (1) whether the applicant attended a rural high school, (2) the school-wide percentage of students eligible for free or reduced-price lunch, (3) the school-wide student-to-teacher ratio, and (4) the size of the 12th-grade class.

Beyond the question of how to define socioeconomic status, there is the question of how much weight to give socioeconomic status when reviewing applicants. In other words, in designing an admissions program that gives some applicants preferential treatment based on SES, a school needs to decide how much of a boost those applicants will receive. As Gaertner and Hart have explained: "the effectiveness of class-based affirmative action with respect to maintaining racial diversity hinges upon the sizes of the boosts class-based systems confer. Poverty and minority status are not perfectly correlated, so if class is intended to replace race in college admissions, the boost attached to an identification of disadvantage or overachievement must substantially outdo the boost attached to minority status."

B. Evaluating Socioeconomic Affirmative Action

Researchers have found it difficult to study empirically the effectiveness of socioeconomic affirmative action programs because very few universities have adopted formal socioeconomic affirmative action programs such as the University of Colorado's. 24 When a school does not have a formal method for assigning and tracking admissions preferences based on SES, it is difficult to study the effects of SES-based preferences. Most studies are, therefore, based on simulations of hypothetical SES-based admission policies. Most simulation studies have found that socioeconomic affirmative action is not an effective and efficient replacement for racial affirmative action because class and race are not correlated strongly enough. 25 There have been a few studies that do suggest class can be an effective substitute for race in affirmative action, but these studies have notable limitations. For example, Carnavale et al.'s

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²² See Matthew N. Gaertner & Melissa Hart, "Considering Class: College Access and Diversity," 7 Harvard Law & Policy Review 367 (2013).

²³ *Id.* at 400

²⁴ "It is difficult to evaluate the effects of SES-based affirmative action in practice . . . because such plans are not widely used." Sean F. Reardon et al., "Can Socioeconomic Status Substitute for Race in Affirmative Action College Admissions Policies? Evidence from a Simulation Model," Educational Testing Service, 2015, at p. 3.

²⁵ See Gaertner & Hart, note 22, at 377-378 ("up to now, the research on class-based policies has shown these policies to be poor substitutes for race-conscious admissions in maintaining racial diversity.").

simulation yielded promising results.²⁶ They built a simulation model for the nation's 193 most selective universities.²⁷ They found that the combined enrollment of African American and Hispanic students would rise from 11 to 13 percent of total enrollment if schools were to adopt their hypothetical SES-based affirmative action policy.²⁸ Moreover, they found that the combined enrollment of African American and Hispanic students would rise to 17 percent if schools were to adopt a top-ten percent plan in addition to their hypothetical SES-based affirmative action policy.²⁹ Carnavale et al.'s simulation is, however, based on certain assumptions that may result in overstating the effectiveness of socioeconomic affirmative action. For example, Reardon et al. note that Carnavale et al.'s simulation uses socioeconomic information that is typically not available to admissions offices.³⁰ Reardon et al. also contend that Carnavale et al.'s simulation makes certain assumptions about applicant behavior that are not realistic.³¹

Gaertner and Hart's study suggested that the acceptance rate for underrepresented minorities at the University of Colorado, Boulder (CU) increased when the school moved from racial affirmative action to socioeconomic affirmative action.³² The authors noted that their research results were "a marked contrast to previous simulations and empirical studies."³³ They believe that that their findings can be explained by the fact that CU now gives a large boost to applicants based on SES status, whereas the boost that CU previously gave based on race was quite small. "Where the race-related boost is relatively small, a significant class-related boost can make a considerable difference."³⁴ Gaertner and Hart caution that socioeconomic considerations are unlikely to maintain the racial diversity produced by racial affirmative action programs if race-based considerations were assigned very strong weight to begin with.³⁵

When evaluating the effectiveness of socioeconomic affirmative action, one should be mindful of the complicating factors that were discussed above in relation to percent plans. The first consideration is the idea of critical mass. Even if a university implements a new socioeconomic affirmative action program that successfully maintains the level of racial diversity that was previously attained through race-based admissions, that level of diversity does not necessarily qualify as a critical mass. The race-based admissions program may have been ineffective at yielding a critical mass of minority students because the race-based preferences were too weak or poorly designed. Another consideration is the tradeoffs of assigning preference based on SES. By placing a great deal of emphasis on class, a university may end up diminishing aspects of diversity that are not correlated with class.

²⁶ Anthony P. Carnevale, Stephen J. Rose & Jeff Strohl, "Achieving Racial and Economic Diversity with Race-Blind Admission Policy," in Richard D. Kahlenberg, ed., *The Future of Affirmative Action: New Paths to Higher Education Diversity after* Fisher v. University of Texas (Century Foundation Press 2014).

²⁷ Id. at 187-188.

²⁸ See Carnevale et al., note 26; Kahlenberg, note 11, at 13 (summarizing the research of Carnevale et al.)

²⁹ See Carnevale et al., note 26; Kahlenberg, note 11, at 13 (summarizing the research of Carnevale et al.)

³⁰ Reardon et al., note 24, at 5.

 $^{^{31}}$ Id

³² Gaertner & Hart, note 22.

³³ *Id.* at 369-370.

³⁴ *Id.* at 400.

³⁵ Id. at 399-400.

³⁶ See footnotes 18-19 and accompanying text.

IV. Race-Neutral Diversity Essays

Universities have increasingly required applicants to submit a "diversity essay" as part of the undergraduate admissions process. These schools prompt applicants to write an essay regarding how that student will contribute to the university's community and/or its diversity. For example, the University of Washington requires its first-year applicants to answer the following short essay question:

Our families and communities often define us and our individual worlds. Community might refer to your cultural group, extended family, religious group, neighborhood or school, sports team or club, co-workers, etc. Describe the world you come from and how you, as a product of it, might add to the diversity of the University of Washington.³⁷

Such prompts are race-neutral in that they do not define diversity and, therefore, do not require applicants to address race or any other specific demographic characteristic. Applicants might, however, choose to write about experiences related to race. For example, an applicant of color might write about her experiences overcoming discrimination in her predominantly white hometown; she might contend that these life experience give her a perspective that would contribute to the university's diversity. An admissions office might indeed view this perspective to be a valuable contribution to diversity. Note that, by giving favorable treatment to the hypothetical applicant who overcame discrimination, the admissions office is not giving preferential treatment based on race *per se* but is rewarding the applicant for her experience overcoming adversity. The admissions office is not simply using the diversity essay to elicit information to fulfill a racial quota, which would run afoul of constitutional law.

To the extent that diversity essays elicit information that strengthens applications from racial minorities, diversity essays help to increase racial minorities' representation among admitted students. To the best of my knowledge, however, there have been no empirical studies on diversity essays' impact on the racial composition of admitted students. This lack of research likely stems from universities' reluctance to share proprietary information about their scoring of application essays.³⁸

Some scholars doubt whether admissions essays help to increase racial diversity, especially at public universities in states where race-based affirmative action has spurred legal controversy. Carbado and Harris contend that university applicants in California may feel pressured to conceal or downplay their race when writing admission essays. The California state constitution, as amended by Proposition 209, bans racial affirmative action in public schools. Accordingly, applicants might mistakenly believe this ban dictates that they should not discuss their race at all in their application materials. Applicants of color may be reticent to write about life experiences that would demonstrate their strengths (leadership skills, overcoming adversity,

³⁷ "2018 Freshman Writing Section," *University of Washington*, available at https://admit.washington.edu/apply/freshman/writing-section (last visited Oct. 27, 2017).

³⁸ Cf. Anna Kirkland & Ben B. Hansen, "'How Do I Bring Diversity?': Race and Class in the College Admissions Essay," 45 *Law & Society Review* 103, 108 (2011) (noting that "Previous work attempting to 'get inside' the admissions process notes that many institutions are quite reluctant to grant access to admissions processes . . ."). ³⁹ Devon W. Carbado & Cheryl I. Harris, "The New Racial Preferences," 96 *California Law Review* 1139, 1148 (2008).

etc.), because those experiences relate to their racial identity, and they worry that their applications will be compromised by discussing race.

Kirkland and Hansen's research, however, suggests that the concerns of Carbado and Harris might be overstated. ⁴⁰ In Kirkland and Hansen's focus group, respondents said that they were aware that the University of Michigan welcomed applicants to discuss race and ethnicity despite Michigan's ban on racial affirmative action. Kirkland and Hansen's analysis of a sample of application materials submitted to the University of Michigan supports this view.

One potential factor worth noting is that diversity essays, like the more general personal statement in applications, might disadvantage lower-SES applicants. Applicants from higher SES groups tend to have access to better resources that enable them to write stronger essays. These resources range from privately hired application coaches to stronger writing instruction at their local public schools.

IV. Next Steps

This literature review has cast doubt on the utility of race-neutral strategies as complete substitutes for overt considerations of race. Still, the literature suggests that the outcomes of race-neutral admission strategies vary depending on the circumstances surrounding the particular universities at issue. Accordingly, the Committee on Race-Neutral Strategies should examine these strategies' appropriateness specifically for UNC-Chapel Hill. For its 2016 report, the Committee conducted simulation-based evaluations of implementing various percent plans at UNC-Chapel Hill. Those simulations can be updated and expanded. The Committee should also run simulations of socioeconomic affirmative action programs, perhaps drawing inspiration from the "Disadvantage Index" used by the University of Colorado at Boulder's admissions office. This examination of a version of the index is a promising approach because UNC-Chapel Hill can identify matches or close proxies for most variables comprising the Colorado index and can potentially supplement that index with additional variables. Finally, the Committee should consider having further discussions about the advantages and disadvantages of race-neutral diversity essays, but there is very little existing empirical research to inform such discussions.

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⁴⁰ Kirkland & Hansen, note 38, at 126-127.**Error! Bookmark not defined.**

INTERIM REPORT FOR THE DATA ANALYTICS SUBCOMMITTEE⁴¹

The Data Analytics Subcommittee of the Race-Neutral Strategies Task Force focused work efforts on two inter-related projects. First, a variety of statistical models were fit to data drawn from the application pool for UNC undergraduate admission from years 2012 through 2016 with the goal of examining the viability of race-neutral alternatives in the application review process. Second, simultaneous equation models (also called path analysis) were fit to the 2015 UNC panel of the Multi-Institution Study of Leadership with the goal of estimating the potential positive student benefits of being embedded within a diverse intellectual community. Each project is briefly summarized, preliminary results are described, and future directions are delineated.

Committee Charge

The Data Analytics Subcommittee of the Race-Neutral Strategies Task Force is charged to:

- 1. Identify available data sources and different, feasible analytic approaches that could support the careful consideration of race-neutral approaches in undergraduate admissions at the University of North Carolina at Chapel Hill.
- 2. Empirically evaluate these analytic approaches and their ability to achieve important institutional outcomes for incoming undergraduate classes.
- 3. Provide regular updates and data reports to the larger Race-Neutral Strategies Committee so that broad input may be provided about the different analytic approaches, legal context, direction, and findings.

UNC Admissions Data

Initial data analytic efforts focused on the 2016 applicant pool that consisted of 33,950 completed applications. Preliminary variables of interest included biological sex, self-identified racial group membership, whether the applicant received a fee waiver, state residency, whether the applicant self-identified as a first-generation college student, six separate measures of academic readiness (e.g., test scores, GPA, quality of written essay, etc.), whether the student was admitted, and whether the student ultimately enrolled. Of the total pool, 5.7% did not endorse any racial category. Of the remaining 31,984, 89.5% reported membership in a single racial category and 10.5% reported belonging to two or more racial categories. A total of 19.9% of all applicants self-identified as an under-represented minority (URM: African American, Latino/Hispanic, Native American/Hawaiian Pacific Islander). Of the 33,950 applicants, 11% requested a fee waiver, 15.5% reported being a first-generation college student, and 59% were female. Finally, 28% of applicants were admitted and 12.4% enrolled.

To model the University's current admissions process, a series of logistic regression models of varying complexity were estimated in which the full set of measured variables described in Appendix F (e.g., certain applicant factors captured in the admissions data) were used to predict admission status. Variables entered the model both linearly and nonlinearly with the inclusion of extensive interactions and polynomial terms. These models were then extended to use the model-

⁴¹ This section was written by Professor Patrick Curran with input from Professor Michael Kosorok and the Committee.

building process of random forests. Numerical results were extensive. Key findings reflect that there are a large number of unique applicant variables that predict admissions status, including underrepresented minority status. Importantly, however, when the model was evaluated without information about applicants' racial/ethnic status, the model's accuracy in terms of the prediction of the applicants' admissions outcome was virtually unchanged. This finding reflects that underrepresented minority status does not meaningfully drive the prediction accuracy of the final multivariate model. Put differently, applicants' racial/ethnic status does not dominate the outcome decision within the current admissions process.

There are four primary directions to which we next turn. First, these initial models were only fitted to available 2016 data; the models will be expanded to a simultaneous analysis of all five years of data to formally examine stability and change in trends over time. Second, efforts will be made to link the existing admissions data to extant family-level data to provide more comprehensive information about constructs such socioeconomic status (SES); the currently available data only provide information about first generation status and fee waiver requests. Much more comprehensive information about family income, parent education, and parent occupation are needed to more fully assess SES. These data allow us to have a fuller understanding of a student's full record, continue to identify relevant and available indicators about family background and SES from the literature, and discuss how educational benefits flow from a diverse student body during college. Third, more advanced machine learning methods will be used to build optimal prediction models based on all available information within and across time. These models will provide an estimate of differential weights that can be applied to each variable domain in the prediction equation; once available, weights can then be fixed and adjusted to determine the subsequent impact on incoming class characteristics as a function of competing alternative selection weighting processes. Finally, the data analytic committee will carefully review expert reports prepared in the University's lawsuit to ensure that future analyses consider promising directions and approaches. Taken together, these results will provide a stronger understanding of the current applicant review and the admissions process.

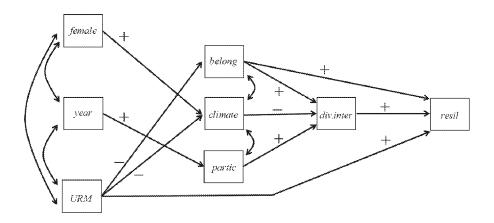
Multi-Institution Study of Leadership

The second focus of the Data Analytics Subcommittee was on the analysis of data drawn from the 2015 panel of the UNC implementation of the Multi-Institution Leaders Study (MSL). The MSL is a national study examining predictors of student leadership in over 250 academic institutions. UNC has participated in the MSL since 2012. Complete survey responses were obtained from 832 UNC undergraduate students. Extensive measures were obtained from each subject covering a broad range of activities related to the undergraduate experience. Key initial variables included the following:

Construct	Original Variable Name	Recoded Variable Name
Biological Sex	DEM7	FEMALE
Year of Enrollment	DEM3.1	YEAR
Under-Represented Minority Status	DEM10a.1-	URM
	DEM10a.8	
Belonging (sense of belonging climate)	BCLIM	BELONG

Climate (non-discriminatory climate)	DCLIM	CLIMATE
Participation (been a member in college	ENV6a	PARTIC
organizations)		
Diverse Interactions (socio-cultural	SOCCUL	DIVINTER
conversations)		
Resilience	OUTRES	RESIL
Leadership Capacity	OMNIBUS	LEADCAP
Leadership Efficacy	OUTEFF	LEADEFF
Grade Point Average	DEM13	GPA
Academic Involvement	sum(ENV4a-	ACADINV
	ENV4g)	

A series of competing models were fit to the sample data to examine potential relations among student characteristics, sense of belongingness, diverse interactions, and school success. A path diagram of one competing model is:



These results indicated that students who self-identify as URM have lower levels of sense of belongingness on campus and view the campus climate as more discriminatory. Higher levels of belongingness and participation in activities is associated with greater diverse interactions on campus, and this in turn is related to higher levels of academic resiliency. Interestingly, URMs report higher levels of resiliency compared to non-URMs after controlling for all other influences in the model. These preliminary results indicate that greater diverse interactions is associated with higher levels of academic resiliency, but that URMs report feeling less belonging to the campus community and are less likely to view the community as inclusive. This is only one example of a number of competing models examining these complex multivariate relations.

The Subcommittee is pursuing multiple future directions in this work in collaboration with the Data Analytics Subcommittee. These directions will help provide more nuance to our existing findings related to perception of campus climate, sense of belonging, engagement in co-curricular and academic engagement, psychosocial development and resiliency by race.

First, members of the Subcommittee will seek to link the MSL data to the existing undergraduate admissions data so that the extensive information provided by the student when applying for admissions can be incorporated into the student experiences once on campus.

Second, Subcommittee members will extend these analyses to include prior panels of data (dating back to 2012) to examine stability and trends in these relations over time.

Third, Subcommittee members will expand the models to include data from other sister institutions, so we may compare and contrast the Carolina experience with that reported by other comparison universities. Specifically, the Subcommittee plans to work with organizations that administer national benchmarking surveys to explore the possibility of adding additional diversity-related survey items to these benchmarking surveys. If granted permission by the national study administrators for MSL and SERU, the benchmarking analysis will involve creating a diversity index measure to compare outcomes based on low, medium and high levels of diversity within- and across-campuses participating in the national data collection. A diversity index, used in several research studies, represents the probability that any two people from a random sample will differ on the basis of race and ethnicity. Interactional diversity is likely to increase as the structural diversity on campus increases (Chang, 1999).

Fourth, the Subcommittee members will conduct modeling using other national data sets, such as the Student Experience in the Research University (SERU) and the Skyfactor Benchwork survey for residential living.

Fifth, the Committee chair, along with colleagues with expertise in measurement and item response modeling, will examine the psychometric properties of student ratings of education benefits of diversity across multiple academic courses. Student characteristics (e.g., gender, need, first generation status, underrepresented status), faculty characteristics (e.g., gender, underrepresented status, rank), and course characteristics (e.g., size, gateway, division) will be assessed for differential item functioning and the multilevel nature of the ratings will be examined if possible.

Finally, the Subcommittee members will continue to be informed by the review of the academic literature on the theoretical models and research related to these concepts.

INTERIM REPORT FOR THE STUDENT EXPERIENCE SUBCOMMITTEE 42

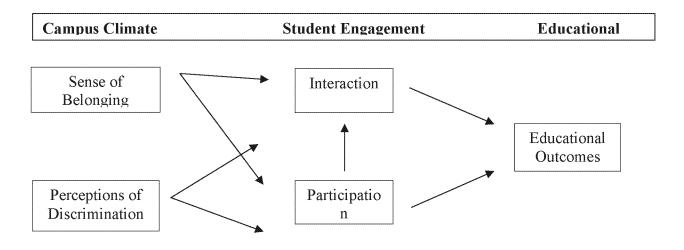
Historically public universities have considered race as a factor in admissions decisions as one means of achieving and maintaining the democratic goal of equal access to education. However, persistent legal challenges have been somewhat effective in limiting the parameters of the practice of race-conscious admissions policies. Most recently, the Supreme Court in *Fisher v. University of Texas* ruled race-conscious admissions policies acceptable if implemented to achieve a diverse student body. The ruling came with a caveat that universities considering race in admissions provide ongoing evidence demonstrating the educational benefits of racial/ethnic diversity.

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⁴² This section was written by Dr. Belinda Locke (Division of Student Affairs) and Dr. Bettina Shuford (Division of Student Affairs) with input from the Committee.

As part of a coordinated effort, researchers at the University of North Carolina are exploring existing data sets to demonstrate the ways in which a racially diverse student body contributes to developmental and learning outcomes. One of the most promising avenues to emerge in the work to date has been the development, testing and refinement of a model identifying a set of pathways and mechanisms through which campus climate contributes to educational outcomes through the mediating influences of student engagement. The model was developed and tested using an institutional data set based on responses of a random sample of undergraduate students who participated in the 2015 Multi-Institutional Study of Leadership.

The proposed model draws on Astin's theory of student involvement (Astin, 1984), and Hurtado, Milem, Clayton-Pedersen, and Allen's 1998 framework for understanding campus climate. In drawing on these two theoretical traditions, the model emphasizes the impact of climate on student engagement which in turn is theorized to influence educational outcomes. These complimentary frameworks provide sound scaffolding for the conceptualized model as they position the self in social context and involvement as an expression of motivation tied to positive educational outcomes.



Structural Diversity

Structural diversity is characterized as the extent to which various racial and/or ethnic groups are represented within a particular organization or community (Hurtado et al., 1998). Early studies of structural diversity examined the experiences of women working in corporate environments (Kanter, 1977). Kanter's research demonstrated that when the proportion of women in the work environment reached a threshold of approximately 35%, the climate and culture of the organization would begin to change. Subsequently, with a "critical mass" of women in the work environment, some of the negative effects of underrepresentation diminished. Scholars report similar trends when applying this lens in investigating the experiences of underrepresented minorities (URMs) on college campuses. Hurtado, Dey, and Treviño (1994) found that campuses with limited structural diversity provided fewer opportunities for learning across social and

cultural differences. Chang (1999) came to a similar conclusion in reporting that students from different backgrounds tended to interact more with one another as the structural diversity of a campus increased. Fries-Britt and Turner (2001) and Steele and Aronson (1995) demonstrate the detrimental effects of stereotyping on college performance for minority students attending predominantly white institutions (PWI). Looking at the experiences of African American, Hispanic, and Philipino students at a large PWI, Smedley, Myers and Harrell (1993) reported an association between the stress experienced by URMs and heightened psychological distress. As part of a decade long research program, The Diverse Learning Environments Survey (Hurtado, Cuellar, Alvres, & Colin, 2009) was administered to students attending 58 four-year colleges. Findings suggest that as structural diversity increased, URMs reported diminished perceptions of discrimination and increased sense of belonging (Hurtado and Carter, 1997; Hurtado, Han, Sáenz, Espinosa, Cabrera & Cerna, 2008; Hurtado & Ruiz, 2015). Additional studies support a connection between structural diversity and educational benefits for minority and majority students (e.g., Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Bowman, 2010; Garces & Jayakumar, 2014; Hurtado, Chang, Saenz, Espinosa, Cabrera, & Cerna, 2007). While the literature highlights different mechanisms by which underrepresentation of one's racial group on campus influences college outcomes, there is agreement for the premise that increases in structural diversity enhance the climate of the learning environment and educational benefits for all students. Due to the limitations of existing data, the proposed model does not empirically test the influence of structural diversity on learning and development. However, structural diversity provides a critical lens through which to view and interpret relations between students' perceptions of climate, involvement in educationally purposeful activities, and outcomes.

Campus Climate and Student Engagement

Hurtado et al. (1998) articulate a framework for understanding the dimensions of campus climate influencing student learning and development in diverse learning environments. The framework conceptualizes campus climate as a product of institutional context, structural diversity, and psychological and behavioral dimensions. The model put forth here originates with students' perceptions of campus climate. Specifically, it invokes sense of belonging and perceptions of discrimination, aligning with Hurtado and colleagues' psychological dimension of climate for diversity (1998). The pathways in the proposed model represent processes or mechanisms through which structural diversity impacts learning and development. The proposed pathways between campus climate and student engagement reflect alignment with current directions in research on achievement motivation that emphasize engagement as developing within a framework of personal and contextual influences (Fredricks, Blumenfeld, & Paris, 2004; Reschly & Christenson, 2012). An extensive body of literature focused on college-student success also highlights the intertwining roles of individual and environmental factors in shaping students' engagement in academic and co-curricular learning environments (e.g., Astin, 1984; Hurtado, Dey, Gurin, & Gurin, 2003; Kuh, Schuh, Whitt, & Associates, 1991; Tinto 1993). Scholars have employed a plethora of variables in studying the impact of students' perceptions of campus climate on various educational outcomes. Whereas multiple directions have proven fruitful, the focus here is on sense of belonging and perceptions of discrimination as key dimensions of campus climate contributing to student engagement.

Like campus climate, student engagement, is a complex construct comprised of multiple dimensions (Hu & McCormick, 2012). Educational research defines engagement in terms of behavioral, cognitive, and affective dimensions (Finn & Zimmer, 2012). Within the context of the current work, student engagement is conceptualized by observable actions or behaviors. The choice to emphasize behavioral engagement is predicated on several factors. First, Astin's theory emphasizes the role of behavioral engagement in characterizing student involvement as the effort invested in experiences in and outside of the college classroom (1984). He notes that while thoughts and feelings contribute to motivation, it is inevitably the actions a student takes that defines involvement. Second, Astin's theory informed the development of the Multi-Institutional Study of Leadership and therefore the instrument provides ample measures of behavioral engagement. And finally, whereas the development of cognitive and affective engagement has been shown to overlap, evidence suggests different circumstances, processes, or pathways contributing to behavioral engagement in educational settings (Archimbault, Janosz, Morizot, & Pagani, 2009). As such, the following sections highlight literature emphasizing associations between sense of belonging and perceptions of discrimination as psychological dimensions of campus climate and participation in educational purposeful activities and interactions as markers of engagement.

Sense of Belonging and Student Engagement

Students' sense of relatedness represents a basic psychological need that in part provides the motivational basis for engagement, learning and mastery (Connell & Wellborn, 1991). Terms such as relatedness (Deci & Ryan, 1985), sense of belonging (McMillan & Chavis, 1986) mattering (Schlossberg, 1989), social connectedness (Schreiner, 2010), and social integration (Tinto, 1993) are used in extant literature to describe feelings or perceptions that one is securely and satisfyingly connected to others in a group or community (Connell & Wellborn, 1991). From a motivational perspective, when a learning environment enhances a student's sense of belonging, they are more likely to engage in activities and behaviors associated with educational achievement. Conversely, if a learning environment undermines students' sense of belonging, they are more likely to disengage and withdraw from participating in activities linked to growth and development. Succinctly, perceptions and experiences of the learning environment influence student engagement through the shaping of self-appraisals of belonging (Connell & Wellborn, 1993).

Research on adolescence highlights sense of belonging and its relation to engagement in school contexts (see Juvonen, 2006). This literature demonstrates strong associations between perceptions of belonging and positive school participation (e.g., Furrer & Skinner, 2003; Van Ryzin, Gravely, & Roseth, 2009; Wentzel, 1998). For example, Benner, Graham, and Mistry (2008) measured school climate employing aggregated measures of sense of belonging, fairness, and interracial climate to predict student engagement in a racially diverse sample of high school students attending schools throughout the greater Los Angeles metropolitan area. School-level perceptions of belonging made significant contributions to adolescent and teacher reports of participation in educational activities. While sense of belonging has not been as widely studied in college settings, research on college student development recognizes the importance of social integration and its influence on student engagement. Tinto identifies social integration as one of

the primary processes influencing a student's institutional commitment, persistence and eventual graduation (Tinto, 1993).

In a series of experiments looking at math motivation and sense of social connectedness, conditions that increased sense of social connectedness predicted higher levels of motivation to remain engaged with a challenging math puzzle (Walton, Cohen, Cwir, & Spencer, S. (2012). In STEM courses belonging emerged as a consistent predictor of academic effort and class participation (Wilson, Jones, Bocell, Crawford, Kim, Veilleux, Floyd-Smith, Bates, and Plett, 2015). In looking at the experiences of transfer students, Allen, Robbins, Casillas and Oh (2008) found perceptions of social connectedness to be a key predictor of persistence at the new institution. While existing research supports relations between sense of belonging and student engagement across demographics, studies suggest the influence of belonging on engagement and achievement may be particularly salient for students holding membership in historically underrepresented racial and/or ethnic groups. In recognizing the salience of belonging for URMs, Wolf-Wendel, Ward and Kinzie (2009) write "higher levels of engagement are typically associated with educational environments that are seen by students as inclusive and affirming" (p. 413). In studying the impact of campus climate on African American students' college experiences, Shreiner (2014) found a stronger sense of belonging contributed to fuller student participation in the campus community. Museus, Palmer, Davis and Maramba (2011) also found perceptions of fit or inclusion as a key factor in URMs decisions to engage in academic and social pursuits on campus. Similarly, Hausmann, Schofield, and Woods (2007) identified sense of belonging as a predictor of student involvement and intentions to persist in a sample of African American and White first-year college students. Samura (2016) employed case study methodology to investigate sense of belonging in Asian American college students. Although the study did not look specifically at belonging as it related to college outcomes, it is unique in that it highlights sense of belonging as an ongoing process that Asian American students negotiate and renegotiate to meet the demands of diverse campus contexts. The process required engagement between competing spheres to negotiate sense of belonging. Whereas some studies suggest belonging as a precursor of engagement, in this study engagement was an important process contributing to sense of belonging. Whereas perceptions of belonging can support or impede college student engagement, sense of belonging develops in contexts characterized by particular circumstances or conditions. In considering students' experiences on campuses with varying degrees of structural diversity, the literature identifies perceptions of discrimination as a key factor exerting influence on student engagement.

Perceptions of Discrimination and Student Engagement

Analyzing a large national data, Hurtado and Ruiz (2015) reported 68.7% of African American students enrolled at moderately diverse institutions had reported being the target of racially biased comments, and 48.1% as feeling excluded from events or activities. Latino students at moderately diverse institutions also reported high experiences of overt and subtle forms of racial bias and discrimination with 55.2% reporting being the target of biased comments, and 38.8% reporting feelings of exclusion. These numbers are troubling under any circumstances, and even more so in considering the negative consequences of a hostile racial climate on educational outcomes. While Harper and Hurtado (2007) found evidence indicating Asian Americans were largely satisfied with their college experiences, other studies highlight Asian students'

perceptions of hostility and racism as characteristic of their educational experiences (Katori & Malaney, 2003; Museus, 2008).

Persistence is one of the most widely researched outcomes in relation to perceptions of discrimination in educational environments. Persistence represents a type of behavioral engagement, whereas the decision to leave or not to persist represents the ultimate expression of disengagement. Nora and Cabrera (1996) found first-year persistence at one college predicted by perceptions of discrimination and prejudice. This held true for both minority and nonminority students. Similar results were reported by Elmers and Pike (1997) who found intent to persist for URMs and majority students equally influenced by perceptions of racial discrimination in the campus environment. Studying the experiences of URMs in STEM, Seymour and Hewitt (1997) found perceptions of racism within the major predictive of students' decisions to leave science, math and engineering majors. As expected the literature illuminates a pattern in which perceptions of a negative racial climate on campus are associated with decreased quality of student engagement in and outside of the classroom (Cabrera et al., 1999; Pascarella & Terenzini, 2005).

One limitation of the research is that many studies aggregate perceptions of racial climate across minority groups. For example, in a study employing structural equation modeling (SEM), persistence for students of color (a category comprised of 7 racial groups) and persistence of white students were predicted by perceptions of the campus climate (Johnson, Wasserman, Yildirim, & Yonai, 2014). In contrast, Museus, Nichols, and Lambert (2008) used multi-group SEM to investigate the relations between perceptions of racial climate and degree completion. Disaggregating the sample into subsamples (Asian, Black, Hispanic and White), enabled the researchers to garner more effective insights into the influence of campus racial climate on degree completion. For all groups, perceived racial climate was the most powerful predictor of institutional commitment. However, with academic and social involvement variables in the model, institutional commitment only predicted degree completion for White students. Interestingly perceptions of campus racial climate predicted academic engagement for Asian and Black students and social engagement for Asians, Hispanics, and Whites. Juxtaposing the results of these two studies reinforces the need for careful consideration of study design and interpretation of results when comparing the impact of perceptions of climate across racial groups.

Student Engagement and Educational Outcomes

A bird's eye view of research on college student development suggests that regardless of the theoretical perspectives invoked engagement in educationally purposeful activities exerts a significant impact on learning and development (Hu & McCormick, 2012). Whereas a large proportion of studies examining climate and student engagement focus on retention and persistence as measures of student success, the literature on student involvement demonstrates associations between diverse types of involvement and academic, social, and psychological outcomes. In support of the proposed model, the following sections present studies illuminating relations between student engagement, conceptualized in terms of participation in educationally purposeful activities and diverse interactions, and educational outcomes such as academic

achievement and leadership as these outcomes align with the mission and goals of the University.

Participation in Educationally Purposeful Activities

Academic and co-curricular contexts are spaces in which students are challenged and supported to engage with ideas, develop skills, and apply knowledge in preparation for effective participation in personal, professional and civic pursuits. Hu and McCormick (2012) used data from the Wabash National Study of Liberal Arts Education and direct assessments to study patterns of student engagement in academic, co-curricular and social contexts. First-year persistence was strongly predicted by the extent to which students participated in the learning environment. Students who demonstrated strong engagement in social and co-curricular contexts, and those who were strongly engaged in academic, co-curricular and social activities saw significant gains in leadership ability. Interestingly, students' orientation toward learning was not significantly predicted by pattern of engagement. These results suggest patterns of engagement may predict specific types of learning and developmental outcomes. Looking at academic and co-curricular engagement individually can provide clearer insights into the mechanisms and contributions of different types of student involvement.

Academic Engagement. In looking at academic engagement, Kuh (2006) concludes that interactions with faculty represent an important type of engagement as these interactions may encourage students to seek out and extend greater effort to other educational activities. This conclusion has ample support in the literature. Informal and formal interactions with faculty outside of the classroom demonstrate positive correlations with student learning (Astin, 1993; Kuh, 2003). Positive interactions with faculty predicted academic competence in first-year students (Reason, Terenzini, & Domingo, 2005), and the quality of student interactions with faculty was found to predict sophomore GPA (Graunke & Woosley, 2005). In studying the experiences of first-generation students, Amelink, 2005 also identified a link between GPA and positive faculty interactions. Studies highlight the strong influence of supportive faculty interactions on the academic engagement and persistence of Native American students (Wolf & Melnick, 1990; Jackson, Smith, & Hill, 2003), while interacting with faculty has proven to be a strong predictor of positive outcomes for both minority and White students (Nora & Cabrera, 1996). In addition to engaging with faculty, peer interactions may also represent a source of influence on achievement. For example, students who act as peer educators or tutors experience positive impacts on learning and development as they must have a strong understanding the content (Pace 1990), and engage more actively in with the material through teaching (Pascarella and Terenzini, 1991).

A second line of research that is particularly relevant to understanding the influence of academic engagement on educational outcomes comes from Kuh's research on high impact educational practices (Kuh, 2008). According to Kuh, high impact educational practices are those practices that are intentionally structured to produce deep, integrative engagement. Examples of high impact practices include first-year seminars, learning communities, internships, study abroad, and undergraduate research. While the term "high impact practice" is relatively new, literature on the types of opportunities that have been identified as high impact is not. For example, in studying service learning Astin, Vogelgesang, Ikeda and Yee (2000) found a positive association

with gains in critical thinking, writing, and GPA. In a study of learning communities at the University of Michigan participants earned higher grades and demonstrated increased intellectual curiosity (Kurotsuchi Inkelas, 2000). However, unlike the previous study, participation in a learning community did not predict higher levels of critical thinking. Kardash (2000) evaluated student outcomes associated with participation in undergraduate research. Ratings of interns and their faculty mentors showed significant alignment. Both interns and faculty members identified observing and collecting data, interpreting data, communicating results, and independent thinking as areas of significant growth. Kuh (2008) has found that URMs, particularly African American and Latino students, and students with low ACT scores may experience greater educational gains from engagement with high impact practices. While these studies are a small sample of the research on high impact educational practices, they support a general conclusion that students who engage deeply in meaningful educational activities will most likely experience gains in learning and development.

Cocurricular engagement. In considering co-curricular involvement, we note a shift in the range of outcomes represented in the literature. Whereas studies of academic engagement often focus on measures of academic achievement such as task or domain related learning outcomes or GPA, studies on gains associated with co-curricular involvement often look at developmental outcomes such as leadership, intra and interpersonal competence, and intercultural competency. There are noted exceptions such as residential education programs that correlate with significant gains in critical thinking (Pascarella, Bohr, Nora, Zusman, Inman, & Desler, 1993). While students living on campus may indeed participate in educational programming within their residence halls, Pascarella et al. note that in conjunction with involvement in educational activities, students who live in residence halls may have higher levels of social interactions with peers and staff, which also act as an impetus to cognitive growth. While there is little consensus on the extent to which co-curricular involvement contributes to academic achievement, there is ample evidence linking co-curricular engagement to the development of leadership skills. Cress, Astin, Zimerman-Oster, and Burkhardt (2001) used a longitudinal design to study the development of students' leadership efficacy across 10 colleges participating in the Coorperative Institutional Research Program (CIRP). After controlling for a number of hypothesized covariates, participation in leadership programs and activities predicted statistically significant differences in participants and nonparticipants scores on leadership skills and civic responsibility with participants scoring higher on both measures. Similarly, Kezar and Moriarty (2000) identified associations between several co-curricular activities and perceptions of leadership ability. Positional activities such as participation in a leadership class, holding an elected position, serving as a resident advisor, and engaging in volunteer emerged as significant predictors of perceived leadership ability. In contrast, nonpositional leadership experiences such as participation in student organizations, intramural sports, and Greek life tended to be stronger predictors of skills associated with leadership such as public speaking, social self-confidence, and the ability to influence others. While participation in academic and co-curricular programs has demonstrated links between academic achievement and skills indicative of leadership capacity, additional studies demonstrate the impact of diverse interactions or interactional diversity broadly characterized by the frequency and quality of intergroup interaction (Gurin, Dey, Hurtado, & Gurin, 2002).

Diverse Interactions. Over the course of the last decade, scholars have investigated cross-group interactions on college campuses as mechanisms contributing to student learning and development. Interactional diversity relates to structural diversity with homogenous campuses proving fewer opportunities for cross-racial interaction (Hurtado, Dey, & Trevino, 1994). The proposed model posits association between diverse interactions and their contribution to academic outcomes and skills associated with effective leadership. Kuh (2008) outlines four factors supporting interactional diversity: (1) studying at a college or university that values and supports diversity by encouraging contact between students from diverse backgrounds, (2) talking with student, staff or faculty who hold membership in different racial/ethnic groups, (3) talking with student, staff or faculty who hold different beliefs or personal values, and (4) attending a college or university that values and supports diversity by including diverse perspectives into curriculum, class discourse and assignments. A number of studies report links between students' exposure to diversity through formal curricular and informal social interactions (Mayhew, Rockenbach, Bowman, Seifert, & Wolniak, 2016). In a series of longitudinal studies, interactional diversity in classroom and co-curricular environments had a positive impact on students' academic and intellectual self-confidence (Chang, Astin, & Kim, 2006; Chang, Denson, Saenz, & Misa, 2004; Denson & Chang, 2009). Interacting with students from a different race and/or culture predicts self-reported gains in academic competence and intellectual development (Hu & Kuh, 2003, Reason, Terenzini, & Domingo, 2006). While formal interactions through coursework with diverse perspectives represent an important source of learning, informal interactions with diversity are an ongoing part of many students' out of class experiences (Gurin et al., 2002). Parker and Pascarella (2013) used longitudinal data from the Wasbash National Study to examine the impact of interactional diversity on leadership development. Results found meaningful conversations with students from different racial or ethnic backgrounds predictive of the development of socially responsible leadership skills. Similarly, Dugan, Kodama and Gebhardt (2012) found associations between engagement in sociocultural conversations with peers predictive of leadership capacity.

Summarizing Remarks

As a means of exploring the contributions of diversity to educational outcomes, we are testing and refining a structural equation model examining the relations between students' perceptions of campus climate, campus engagement, and educational outcomes prioritized in the University mission. Although college campuses are complex environments experienced by diverse students in individual ways, research on campus climate and college student development offers support for understanding how a diverse learning environment contributes to the quality of effort students invest in their college experience and subsequently how those efforts impact learning and development. Students may come to college with certain characteristics and experiences, however no one set of characteristics can guarantee student success. Theories of achievement motivation and college student development, and the literature reviewed here, strongly support the premise that students' perceptions of the campus climate, their participation in educational programs and activities, and the interactions encountered during college all play influential roles in shaping learning and development.

References

- Allen, J., Robbins, S., Casillas, A., & Oh, I. (2008). Third-year college retention and transfer: Effects of academic performance, motivation, and social connectedness. *Research in Higher Education*, 49, 647-664.
- Amelink, C. (2005). *Predicting academic success among first-year, first generation students*. Unpublished Ph.D. dissertation. Virginia Polytechnic Institute and State University.
- Archambault, I., Janosz, M., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school: Relationship to dropout. *Journal of School Health*, 79, 408-415.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297-308.
- Astin, A. W. (1993). What Matters in College? Four Critical Years Revisited (1st Ed.). San Francisco: Jossey-Bass.
- Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). *How service learning affects students*. Los Angeles, CA: Higher Education Research Institute, UCLA.
- Benner, A. D., Graham, S., & Mistry, R. (2008)/ Discerning direct and mediated effects of ecological structures and processes on adolescents' educational outcomes. *Developmental Psychology*, 44, 840-854.
- Bowman, N. (2010). College diversity experiences and cognitive development: A meta-analysis. *Review of Educational Research*, 80(1), 4–33.
- Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E. & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between white students and African American students. *The Journal of Higher Education*, 70, 134–160.
- Chang M. J. (1999). Does racial diversity matter? The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40, 377-395.
- Chang, M. J., Astin, A.W., & Kim, D. (2006). Cross-racial interaction among undergraduates: Some Consequences, causes, and patterns. *Research in Higher Education*, 45(5), 529-553.
- Chang, M. J., Denson, N., Saenz, V., & Misa, K. (2004). *The educational benefits of cross-racial interaction for undergraduates: A hierarchical linear modeling study.* Paper presented at the Association for Institutional Research, Boston.
- Connell, J., & Wellborn J. (1991). Competence, autonomy and relatedness: a motivational analysis of self-system processes. In M. Gunnar & L. A. Stroufe (Eds.), *Minnesota*

- symposium on child psychology: self-processes and development. Chicago: University of Chicago Press.
- Cress, C., Astin, H., Zimmerman-Oster, K., & Burkhardt, J. (2001). Developmental outcomes of college students' involvement in leadership activities. *Journal of College Student Development*, 42, 15-27.
- Deci, E., & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46(2), 322-353.
- Dugan, J. P., Kodama C. M., & Gebhardt, M. C. (2012). Race and leadership development among college students: The additive value of collective racial esteem. *Journal of Diversity in Higher Education*, 5(3), 174-189.
- Elmers, M., & Pike, G. (1997). Minority and nonminority adjustment to college: Differences or similarities? *Research in Higher Education*, 38, 77-97.
- Finn, J., & Zimer, K. (2012). Student engagement: What it is? Why does it matter? In S. Christensen, A. Reschley, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 97-131). New York: Springer.
- Fischer v. University of Texas at Austin, 570 U.S. (2013).
- Fredericks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59 109.
- Fries-Britt, S., & Turner, B., (2001). Facing stereotypes: A case study of black students on a white campus. *Journal of College Student Development*, 42, 420-429.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148–161.
- Garces, L. M., & Jayakumar, U. M. (2014). Dynamic diversity: Toward a contextual understanding of critical mass. *Educational Researcher*, 43(3), 115–124.
- Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72, 330-366.
- Graunke, S. S., & Woosley, S. A. (2005). An exploration of the factors that affect the academic success of college sophomores. *College Student Journal*, *39*, 367-376.
- Harper, S., & Hurtado, S., (2007). Nine themes in campus racial climates and implications for institutional transformation. In S. Harper and L. Patton (Eds.), *Responding to the realities*

- of Race on College Campuses. New Direction for Student Services, San Francisco: Jossey Bass.
- Hausmann, L., Scofield, J., & Woods, R. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education*, 48, 803-839.
- Hu, S., & Kuh, G. (2003). Diversity experiences and college student learning, and personal development. *Journal of College Student Development*, 44, 320-334.
- Hu, S., & McCormick, A. (2012). An engagement-based student typology and its relationship to college outcomes. *Research in Higher Education*, *53*, 738-754.
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70, 324–345.
- Hurtado, S., Chang, J., Saenz, V., Espinosa, L., Cabrera, N., & Cerna, O. (2007). Predicting transition and adjustment to College: Minority biomedical and behavioural science students' first year of college. *Research in Higher Education*, 48, 841-887.
- Hurtado, S., Cuellar, M., Alvarez, C., & Colin, L. (2009). Assessing diverse learning environments: Integrating assessments of campus climate, practices, and outcomes. Paper presented at the National Conference on Race & Ethnicity in American Higher Education, San Diego.
- Hurtado, S., Dey, E. L., Gurin, P. Y., & Gurin, G. (2003). College environments, civersity, and student learning. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. 13; pp. 145-189). Boston: Kluwer Academic Publishers.
- Hurtado, S., Dey, E., & Treviño, J. (1994). *Exclusion or self-segregation? Interaction across racial/ethnic groups on college campuses*. Paper presented at the American Educational Research Association conference, New Orleans.
- Hurtado, S., Han, J. C., Sáenz, V. B., Espinosa, L., Cabrera, N., & Cerna, O. (2007). Predicting transition and adjustment to college: Biomedical and behavioral science aspirants' and minority student first year of college. *Research in Higher Education*, 48, 841–887.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A., & Allen, W. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21(3), 279–302.
- Hurtado, S., & Ruiz Alvarado, A. (2015). *Discrimination and bias, underrepresentation, and sense of belonging on campus*. Los Angeles, CA: Higher Education Research Institute.
- Jackson, A., Smith, S., & Hill, C. (2003). Academic persistence among Native American college students. *Journal of College Student Development*, 44, 549-565.

- Johnson, D., Wasserman, T., Yildirim, N., & Yonai, B. (2014). Examining the effects of stress and campus climate on the persistence of students of color and white students: An application of Bean and Eaton's psychological model of retention. *Research in Higher Education*, 55, 75-100.
- Juvonen, J. (2006). Sense of belonging, social bonds, and school functioning. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 655 674). Mahwah, NJ: Erlbaum.
- Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965–989.
- Kardash, C. (2000). Evaluation of an undergraduate research experience: Perceptions of undergraduate interns and their faculty mentors. *Journal of Educational Psychology*, 92, 191-201.
- Kezar, A., & Moriarty, D. (2000). Expanding our understanding of student leadership development: A study exploring gender and ethnic identity. *Journal of College Student Development*, 41, 55-69.
- Kuh, G. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Washington DC: Association of American Colleges and Universities.
- Kuh, G. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change*, 35, 24-32.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2007). *Piecing together the student success puzzle: Research, propositions, and recommendations*. ASHE Higher Education Report, 32(5). San Francisco: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). What matters to student success: A review of the literature. Commissioned Report: http://nces.ed.gov/IPEDS/research/pdf/Kuh_Team_Report.pdf [accessed February 2018].
- Kuh, G. D., Schuh, J. H., Whitt, E. J., & Associates (1991). *Involving colleges: Encouraging student learning and personal development through out-of-class experiences*. Jossey-Bass, San Francisco.
- Kurotsuchi Inkelas, K. (2000). *Participation in living-learning programs at the University of Michigan: Benefits for student and faculty.* (Occasional CRLT Paper no. 15). Ann Arbor: Center for Research on Learning and Teaching, University of Michigan.
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., & Wolniak, G. C. (2016). How college affects students: 21st century evidence that higher education works (Vol.3). San Francisco: Jossey-Bass.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(11), 6-23.

- Museus, S. (2008). The model minority and inferior minority myths: Stereotypes and their implications for student learning. *About Campus*, 13, 2-8.
- Museus, S., Nichols, A., & Lambert, A. (2008). Racial differences in the effects of racial climate on degree completion: A structural equation model. *The Review of Higher Education*, 32, 107-134.
- Nora, A., & Cabrera, A. (1996). *The role of significant others in the adjustment and persistence of minorities and non-minorities in higher education*. Paper presented at the annual meeting of the Association for the Study of Higher Education. Memphis, TN.
- Pace, C. R. (1990). *The undergraduates: A report of their activities and college experiences in the 1980s.* Los Angeles: Center for the Study of Evaluation, UCLA Graduate School of Education.
- Parker, E. T., & Pascarella, E. T. (2013). Effects of diversity experiences on socially responsible leadership over four years of college. *Journal of Diversity in Higher Education*, 6(4), 219-230.
- Pascarella, E., Bohr, L., Nora, A., Zusman, B., Inman, P., & Desler, M. (1993). Cognitive impacts of living on campus versus commuting to college. *Journal of College Student Development*. 34, 216-220.
- Pascarella, E., & Terenzini, P. (2005). How college affects students: A third decade of research, Jossey-Bass, San Francisco.
- Pascarella, E., & Terenzini, P. (1991). How college affects students. Jossey-Bass, San Francisco.
- Reason, R., Terenzini, P., & Domingo, R. (2005). First things first: Developing academic competence in the first year of college. Paper presented at the annual meeting for the Association of Institutional Research, San Diego, CA.
- Reschley, A., & Christenson, S. (2012). Jingle, jangle, and conceptual haziness: Evolution and future of the engagement construct. In S. L. Christenson, A.L. Reschley, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 3 19). New York: Springer.
- Samura, M. (2016). Remaking selves, repositioning selves, or remaking space: An examination of Asian American college students' processes of "belonging". *Journal of College Student Development*, 57, 135-150.
- Schlossberg, N. K. (1989). Marginality and mattering: Key issues to building community. In D. C. Roberts (Ed.), *Designing campus activities to foster a sense of community* (New Directions for Student Services No. 48, pp. 5-15). San Francisco: Jossey-Bass.
- Schreiner, L. (2014). Different pathways to thriving among students of color: An untapped opportunity for success. *About Campus*, 19(5), 10-19.
- Seymour, E., & Hewitt, N. M., (1997). *Talking about leaving: Why undergraduates leave the sciences*. Boulder, CO: Westview Press.

- Smedley, B., Myers, H. F., & Harrell, S. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *The Journal of Higher Education*, 63, 434 452.
- Steele, C., M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69, 797-811.
- Tinto, V. (1993). *Leaving college: rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago.
- Van Ryzin, M., Gravely, A., & Roseth, C. (2009). Autonomy, belongingness, and engagement in school as contributors to adolescent psychological well-being. *Journal of Youth and Adolescence*, 38, 1–12.
- Walton, G. M., Cohen, G., Cwir, D., & Spencer, S. (2012). Mere belonging: The power of social connections. *Journal of Personality and Social Psychology*, 102, 513-532.
- Wentzel, K. R. (1998). Student motivation in middle school: the role of parents, teachers, and peers. *Journal of Educational Psychology*, *90*, 202–209.
- Wilson, D., Jones, D., Bocell, F., Crawford, J., Kim, M., Veilleux, N., Floyd-Smith, T., Bates, R., & Plett, M. (2015). Belonging and academic engagement among undergraduate STEM students: A multi-institutional study. *Research in Higher Education*, *56*, 750-776.
- Wolf, W., & Melnick, R. (1990). *The status of minority students at Arizona State University*. Tempe, AZ: Survey Research Laboratory.
- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development*, 50, 407-428.